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ESTABLISHED 1891 PUBLISHED EVERY SATURDAY

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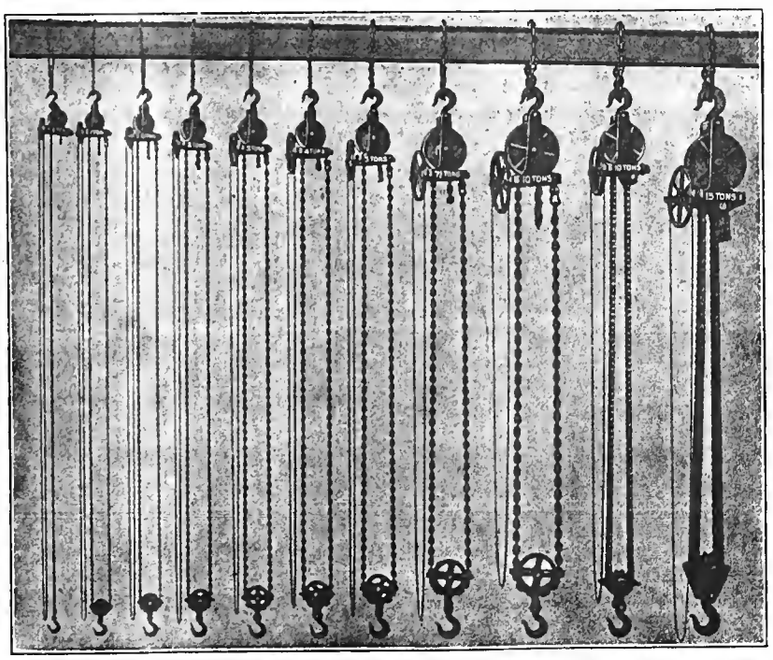

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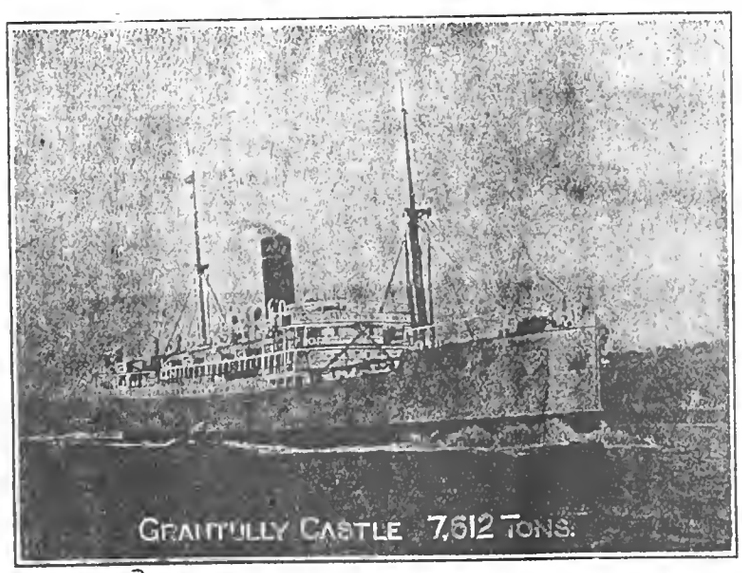

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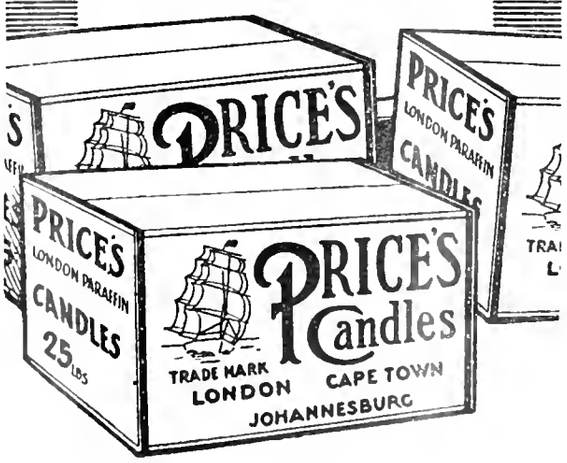

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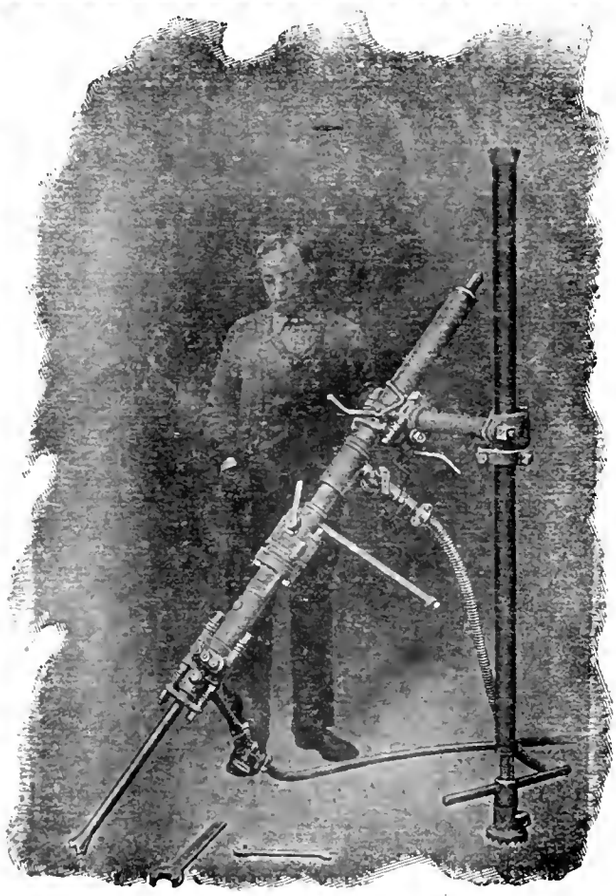

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Notes and News.

A New "Outside" Venture.

Mr. W. T. Hallimond, the well-known engineer, has returned to the Rand after a successful business visit of nine months to Europe and the States. Mr. Hallimond has succeeded in raising capital in Paris for a promising "outside" gold proposition in the neighbourhood of the Louis Moore mine. A company is to be registered under the name of the "Ophir Mines, Ltd.," with a capital of £50,000; and operations are to commence at once. The purchase of a second-hand mill is also contemplated, as new machinery cannot, in the circumstances, be easily obtained. We wish the venture every success.

* * * *

May Consolidated.

The secretary writes: " I am directed to inform you that the shaft of the above-named company started moving between Levels Nos. 1 and 2 at about one o'clock to-day (the (6th inst.). The movement is at present continuing, and therefore its full effect cannot as yet be gauged. Milling will be suspended to-morrow to allow of repairs being effected."

* * * *

Coal Bye-Products.

The increasing interest in the possibilities of coal bye-products of various kinds which has occupied the attention of scientists in England, and notably, also, in the United States, for the past ten years has received considerable impetus from the economic position arising out of the war. The coal deposits of South Africa have not escaped attention in this connection, and one hears of enquiries from more than one industrial group of recognised standing abroad for material suitable for bye-product process. Nitrogen, particularly, is the element that is sought for, and the investigations of the Natal Ammonium Company and others have shown that some of the coals of this country are characterized by a comparatively high nitrogen percentage. The market for fertilizers, for which substances the nitrogen is required, is largely, if not entirely, a foreign one at present, for the imports of ammonium sulphate into the Union are almost negligible in value. The fertilizer habit, however, is one that will grow, as farmers are educated with regard to the productive possibilities of soils which are now very much exhausted by continuous and unassisted crops. Apart from this, the demand of the Union for coal and shale products is sufficiently large to make a beginning with, the imports of oils of various kinds, petrol, and paraffin wax amounting in value to about £700,000 per annum.

* * * *

Sulphuric Acid.

The reference to the bye-products of coal and shale reminds us of the existing demand for sulphuric acid and the certainty that the demand will increase rapidly in the early future. The difficulty hitherto experienced by large users of acid in the Union of South Africa, especially by the explosive manufacturers, has been that no local sources of sulphur have been found of sufficient importance to justify the erection of an acid-making plant. It is said that part of such a plant has been erected at Modderfontein for some time past, and the remaining sections would certainly have been completed if sulphur compounds, iron pyrites for example, had been assured in the country itself. For years past enquiries have been made by those interested in the matter, and it may be remembered that the resources of the Witkop zinc mine in this respect were investigated several years ago by the Modderfontein people. Latterly the big occurrences of pyrite at Areachap appear to have met requirements to some extent, and since there is said to be a large reserve of this ore in sight it is likely that the first steps will be taken towards the establishment of a more or less permanent sulphuric acid industry. The existence of a works actually engaged in buying and treating locally produced pyrite will be an encouragement to prospectors and others to find the necessary material. So far, guarantees as to supply have

naturally been required by possible purchasers, and it has not been easy to give them. When more exploratory work has been done, as it doubtless will be with the prospect of a regular market, the question of a constant output will probably be a much easier problem than it is to-day.

* * * *

Carolina Asbestos.

The directors' report and accounts of the Carolina Asbestos Co., Ltd., for the year ended 30th September, 1916, shows that the property comprises all the rights to asbestos on the farm Diepgezit No. 33, district Carolina, together with facilities for working the same. The property remained on lease during the year, but no work of any description has been done by the lessee. When the European war broke out, the lessee's option was extended free of payment for such time as the conditions in Europe might prevent active operations being carried out on the property, but as the conditions for which suspension of the working of the original contract was granted have ceased, notice was given on the 26th May, 1916, that the company would require the option-holder to re-start working from the 1st July, 1916. The expenditure for the year amounted to £36 18s. 2d., which has been added to the amount standing to the debit of income and expenditure account at 30th September 1915, which now stands at £4,030 17s. 3d.

* * * *

The Brakpan Government Lease.

In the circular issued to the shareholders of the Brakpan Mines, Ltd., it is stated, *inter alia*, that the Government participation in the profits of the leased and amalgamated areas is based, after a period of five years, on a sliding scale according to which profits accruing from reduced working costs or increased grade are divided between the parties concerned. The following is the formula that has been adopted for the purpose of calculating this division of profit:—

$$Y = \frac{50 - 1150}{X}$$

Y is the Government's share of profits, which has to be ascertained; X is the actual working profit. Illustration.—Recovered value of ore per ton, 32s.; working costs, 19s.; profit, 13s. Thus X is equal to 40.6 per cent. of the value recovered. The formula thus becomes:

$$Y = \frac{50 - 1150}{40.6}$$

1150 divided by 40.6 is 28.3; 50 – 28.3 is 21.7. The Government's share of the whole profit of the amalgamated block is, therefore, 21.7 per cent., to which must be added the statutory profits tax, 10 per cent., making the total Government's share equal to 31.7 per cent.

* * * *

Latest Modder B. Report.

The report of the directors of the Modderfontein B. for the quarter ending 30th September, 1916, shows that the number of feet driven, sunk and risen, exclusive of stopes, was 4,154 feet. There was sampled 2,437 feet, of which 1,111 feet exposed payable Main Reef Leader, the average width and value being 25 inches and 31·6 dwts. respectively. The yield, working costs and total profit were practically the same as in the preceding quarter. Development operations continue to disclose a fair proportion of high-grade ore. Capital expenditure for the period totalled £8,109, on account of the increase to the reduction plant and new married quarters.

* * * *

New Modder.

The report of the directors of the New Modder for the quarter ending 30th September, 1916, shows that the total footage accomplished was 10,096 feet, made up as follows:—Drives, 3,788 feet; winzes and raises, 3,807 feet; crosscut raises, 305 feet; crosscuts, 447 feet; incline shafts, 222 feet; sundry, 281 feet; main haulage roads, 1,246 feet. The footage sampled was 6,610 feet, of which 5,685 feet exposed payable reef averaging 13 inches in width and 39·4 dwts. in value. The working profit for the quarter totalled £491,311, a slight decrease as compared with the previous quarter, the yield being a little lower and working costs a little higher. Development was carried out on a greatly increased scale, particularly in the circular shaft section, where considerable progress can be reported. The reef disclosures throughout the mine can on the whole be regarded as entirely satisfactory. Work in connection with the new reduction plant is proceeding as rapidly as circumstances permit, and a considerable amount of stone and concrete work has been carried out. Machinery and material is also gradually coming forward. Capital expenditure on development and equipment for the quarter amounted to £78,531, of which £40,652 was spent on development and underground equipment, and the balance on the surface in connection with the new plant.

* * * *

E.R.P.M. Position.

The report of the directors of the East Rand Proprietary Mines, Ltd., for the quarter ended 30th September, 1916, shows the following results:—Shaft sinking: Incline shaft sinking, 340 feet. Development: Number of feet driven, risen and sunk (excluding shafts), 10,429 feet; footage sampled, 7,688 feet; average reef channel width, 25 inches; average assay value over reef channel width, 10·5 dwts.; number of cubic feet excavated (stations, ore bins, etc.) in addition to above footage, 72,292 cubic feet. The actual expenditure on development amounted to £50,295 2s. 11d., as against £57,743 15s., provided in the working costs (at 2s. 8d. per ton milled), leaving a balance of £7,448 12s. 1d., which, added to the balance at 30th June, 1916, of £346,833 17s. 1d., gives a total of £354,282 9s. 2d. standing to the credit of development suspense at 30th September, 1916. Debentures to the nominal value of £86,610 have been purchased during the past nine months. The development values for the quarter show a slight improvement. Working costs, £449,428 9s. 1d., or 18s. 8d. per ton milled; working profit, £133,853 11s. 4d., or 5s. 7d. per ton milled; working revenue, £583,282 0s. 5d., or £1 4s. 3d. per ton milled.

* * * *

The Training of South African Miners.

Last week's *Gazette* contained an announcement to the effect that the Government Miners' Training School will in future be one of a group of miners' training schools under the supervision of a board of control. The present system of taking on learners on the mines will be stopped, as the Chamber of Mines has begun to take an active interest in the miners' school principle. In future no more learners are to be taken on, but anyone wishing to enter the mines will have to have passed certain tests set by the schools and will have followed a two years' course in the schools. At present there is only one school, but it is hoped early in the new year to open another and larger institution in the neighbourhood of the Bantjes mine, where some 200 boys will be accommodated and in due course the scheme will be further extended, so that ere long there will be similar institutions all over the Rand. The Wolhuter school, under the management of Mr. Warnicott, has proved an unqualified success, and the miners who have been and will be produced from that school will be technical miners in every sense. The age of admission so far has been 16 years, and men up to the age of 25 are taken. The only test the boys have to pass for admission is a medical one, and for those who are so inclined evening classes are provided—of which so far the boys have taken the fullest advantage. It may be found advisable in the new scheme to raise the age of admission to 17, as it is considered in some quarters that a boy of 16 is really too young. Whatever is done, however, one can rest assured that the new scheme will prove of the greatest benefit for the whole of South Africa. The new board of control will hold its first sitting in the course of the next few days, when all particulars are to be settled.

* * * *

Johannesburg Trades School.

A distribution of prizes was held on Thursday evening by the Johannesburg Trades School. Professor John Orr (Chairman of the Governing Body) presided. Mr. Linscott, principal of the school, gave some interesting details in connection with the number of pupils at

the front, the average being one in five of the pupils received since the school had opened. In welcoming the parents and their friends, the Chairman said that the school had made satisfactory progress during the year, and that there had been no difficulty in placing the lads on the completion of their courses. In this connection he expressed the indebtedness of the school to the Chamber of Mines, resident engineers of mines, and private employers who had given assistance. The first product of the two years' preparatory course was now ready to leave, the course having been introduced at the request of the employers and having proved quite satisfactory. He acknowledged with great appreciation the receipt of £100 from the Municipality, and the money, he said, had been used for the purchase of books for a students' library. They were also much indebted to the Council of Education for again donating the prizes. The standard of admission to the school was now Standard VI., thus bringing the institution into harmony with the secondary schools, although for a limited period a pass in Standard V. was being accepted. In order to encourage more ambitious students to aspire to higher education, arrangements had now been made for preparatory matriculation evening classes, which would be conducted from the beginning of next term, at the Commercial High School. In conclusion, Mr. Orr referred to the excellent work of the principal and staff and of the secretary (Mr. McInnes). Mr. Emrys Evans, C.M.G., member of the Witwatersrand Council of Education, and Mr. Adamson also spoke.

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Zaaiplaats Tin Mining Co., Ltd.

The directors' report of the Zaaiplaats Tin Co., for the quarter ended 31st October, 1916, shows that the mill ran on 81 days during the quarter, crushing 7,540 short tons, the duty per stamp being 9.4 tons per 24 hours. In addition, 3,453 short tons of sands residues were re-treated. The output for the quarter amounted to 68 long tons of concentrates, assaying approximately 69 per cent. metallic tin. In addition, 1 long ton of metallic tin was produced, and sold, assaying 98.2 per cent. The results of cent. metalic tin. In addition, 1 long ton of metallic tin was working show an estimated loss of £1,878 0s. 3d., excluding Government taxes and directors' fees, made up as follows: Estimated loss for the three months' operations, £2,118 0s. 3d.; deduct adjustments of estimated values of previous shipments, £240, leaving a balance of £1,878 0s. 3d. N.B.—The average price per ton of metallic tin on which the above figures have been calculated is £169. The following capital expenditure has been incurred during the quarter: Machinery and plant, £530 19s. 1d. No. 13 Section.—Encouraging indications of the extension of the main ore body in this section were picked up in the N.W. face, towards the end of the quarter. Driving is being pushed ahead in order to determine whether this is the true extension or not. The output from this section of the mine was obtained from branch ore bodies only. T.C.L. Lease.—The 3rd level on the dip of the existing workings has not yet reached the mineralised zone. The tonnage output from this area fell off during the quarter. During the quarter 10,530 tons of ore were mined and disposed of as follows:—Apportioned to T.C.L., 136 short tons; total waste sorted, 4,775 short tons; sent to mill, 7,540 short tons; 12,541 short tons; less taken from reserve dumps, 5,921; less waste sorted, 4,000; 1,921 short tons; a total of 10,530 short tons. Water supply.—0.16 inches of rain fell on one day during the period under review. The water supply has been greatly strengthened by rains which have since fallen. In view of the unsatisfactory results of working for the past several months, the Board has decided to temporarily suspend crushing operations as from the 1st December, and to utilise the remaining cash resources of the company in developing existing ore bodies, and in generally prospecting the property with a view to building up a reserve of ore, and thus placing the mine in a more satisfactory position. Expenditure will be reduced as far as possible, consistent with the amount of development work to be carried out.

TOPICS OF THE WEEK.

THE EAST RAND GOVERNMENT LEASES.

It is gratifying to find that the new policy adopted by the Government in dealing with mining leases on the Far East Rand has met with a fair measure of success. In the case of previous applications for tenders the principal feature of the official notices relating thereto has been the laying down of a minimum royalty basis as a starting point for competitive efforts on the part of enterprising capitalists. The results of this method in the case of the Government Gold Mining Areas (Modderfontein), Ltd., were sufficient to show the great disadvantages of so rigid an arrangement, and subsequent attempts on the part of the Government to lease other blocks of ground on the same lines were not warmly received by the mining groups. In the Government notices which were published last August with respect to the Brakpan and Modderfontein leases there was no minimum basis of any kind except that of the 10 per cent. and any further tax that might hereafter be imposed by the State. The evidence that was given before the Select Committee on East Rand Gold-Bearing Areas did not indicate that even this stipulation was regarded as a satisfactory foundation to build upon. The view of those most likely to interest themselves financially in the matter was, apparently, that the existing tax of 10 per cent. on profits, and other possible taxes, should be taken as the limit in the way of State remuneration. As far as the published information goes, the tenders that have been accepted for the Brakpan and Modderfontein areas are a considerable advance on this suggestion.

It goes without saying that those companies which were working claims immediately adjacent to the blocks in question were in a great deal more advantageous position than any other parties who were likely to make an application for the leases. They have thus been able to make proposals which are probably well in advance of any of the others that have been received. That of the Brakpan Mines, doubtless because it was more liable to meet with strong competition, was unquestionably generous. It may be doubted whether the offer of 12½ per cent. over and above the profits tax was greatly in excess of the next most favourable tender, but there can be no doubt whatever, we think, that the willingness of the company to pay a royalty of 5 per cent. of the profits of the amalgamated concern from the very outset was a proposal that could not well have been put forward by anyone else. The idea originated, of course, in dealing with the "bewaarplaatsen," where existing blocks of claims were enlarged by buying Government mining ground on a sort of instalment plan, but the application of it to the matter of Government leases of "deferred" claims was probably as unexpected as it was acceptable. As things stand, the Government will receive 15 per cent. of the amalgamated company's profits almost immediately, instead of having to wait, as on the original leasing basis, for at least five or six years. Thereafter the royalty will be 12½ per cent., plus the 10 per cent. profit tax, or 22½ per cent. altogether, and since the former payment will be increased according to a sliding scale, it is evident that the terms offered are quite as good as could reasonably have been expected by anyone.

In the case of the Modderfontein ground there is not the same factor of "deferred" working to be considered so that the payment of a 10 per cent. royalty on the profits of the amalgamated company has not the ultra-generous aspect that characterises the offer of the Brakpan Mines. In view of the fact that £1,184,000 has to be provided by the Central Mining and Investment Corporation, however, and that there does not seem to be the same attraction in the Rand Klip and Cloverfield claims as there is in the claims adjacent to Brakpan, it cannot be said that the Corner House has shown anything like a niggardly spirit in dealing with the Government. On the large scale of operations which will be possible on the leased areas, and which is doubtless contemplated by the successful tenderers, a royalty of 20 per cent. on the profits of the amalgamated companies is a great deal better than it may appear at first sight, by comparison, with the Brakpan proposals. Indeed, taking all the factors of each case into consideration, it is difficult to say which is the more favourable from the point of view of the public advantage. Later

on more detailed information will be afforded by the Mines Department, and it will then be possible to weigh the pros and cons more accurately. However that may be, we agree with our morning contemporary that both the Minister of Mines and the Government Mining Engineer are apparently to be congratulated on the success of their efforts. It seems to us, also, that both the mining groups concerned are no less to be commended for the liberal way in which they have recognised the principle of State partnership in the undeveloped gold field of the Far East Rand.

THE DE BEERS MEETING.

De Beers shareholders and the country in general are to be congratulated on the wonderful recovery in the diamond industry as revealed at the annual meeting of that company last week. A report of the proceedings will be found in another part of this issue, and the speeches of the Chairman, Mr. Francis Oats, and of Mr. S. B. Joel, give a very full and informative account of the altered situation. The De Beers' figures themselves afford the best reflex of the change. In the year ended June 30th, 1916, the revenue from diamonds amounted to £2,142,091, as against £574,398 for the year previously. This latter figure included one month of the pre-war period, so that during the financial year ended June 30th, 1915, there were practically no sales. One parcel sold towards the end of June, 1915, and realising approximately £124,000, represented the sum total of the transactions for that year. The contrast between this and the £2,142,091 constituting the revenue on diamond account for the year now under review will show at a glance the extent to which the market had recovered. Not only has there been a very substantial revival of confidence and consequently of business, but this state of things has since continued in a steadily progressive ratio, and—there seems every reason to believe, despite the continuance of the war—will henceforward be fully maintained. Mr. Oats showed how the directors of De Beers Company, in accordance with their traditional policy, carefully adjusted their output to the precise requirements of the renewed demand. When this first began to make itself apparent, in the early part of the financial year, they renewed washing operations at Bultfontein and Wesselton, as from 1st January, 1916, and at Dutoitspan in April. As the demand further increased, they found it possible and expedient to re-start, on a limited scale, actual mining, and accordingly in May and June of the present year the Wesselton and Bultfontein mines were gradually re-opened. As the *Diamond Fields Advertiser* well puts it: "While, therefore, we may have been indebted in the first instance to America's abounding prosperity for the renewed disposition towards the purchase of diamonds which it was naturally calculated to create, the real salvation of the industry, and the element which was responsible for the restoration of confidence to the trade, upon which everything depends, was undoubtedly the sound and wise policy adopted at in the first place closing down production entirely when the demand ceased at the outbreak of the war, and subsequently only resuming operations in the most cautious and circumspect manner, and feeding the market with strictly limited quantities, carefully adjusted to the growing demand. There can be no question that by the adoption of this policy, now wholeheartedly subscribed to and participated in by all the leading producers, the recovery originally attributable to the American prosperity was materially expedited, and the demand itself increased." The shareholders in the diamond mines have, of course, already begun to reap the benefit. The Jagersfontein Company has paid a dividend of 15 per cent., and the Premier Company two preference dividends amounting to 12s. 6d. per share. In the case of De Beers Company, as will be seen from the financial statement, the preference shareholders have already received a dividend of 10s. per share in respect of the half-year ended 31st December, 1914, amounting to £400,000, and of 20s. per share in respect of the year ended 31st December, 1915, amounting to £800,000, making in all a payment in dividends of £1,200,000. To this will shortly be added the payment of the further preference dividends to 30th June, 1916, and to 30th December, 1916, thus redeeming all obligations to preference shareholders down to the close of the present calendar year. The fact that there will then have been paid in dividends, during the war period, no less than two millions sterling, bears eloquent testimony to the strength of the company's financial resources, and the soundness of the policy pursued. And the State, both directly and indirectly, has likewise benefited. We may recall that its direct share alone promises for the year to be ten times the original estimate. The moral of the whole matter is that the controllers of the diamond industry have been right all along. Their policy, as explained by Mr. Joel at the recent "Johnnies" meeting, and elaborated by him at the De Beers' meeting, has been completely vindicated, and the Government and the country can safely trust the wisdom and experience that have steered the industry through all the difficulties of the recent past to prove equally successful in the future.

THE TRANSVAAL COAL INDUSTRY.

Some very interesting light was thrown on the present position of the Transvaal coal industry by Mr. S. C. Black at the meeting of the Transvaal and Delagoa Bay Investment Co., Ltd. Having reviewed the results of the year's operations at the Transvaal and Delagoa collieries, which are owned by the Investment Company, Mr. Black turned to the affairs of the coal mining industry in general. He showed that the Transvaal Coal Owners' Association carried on its usual distribution work uninterruptedly during the year, and had dealt with 5,462,400 tons of coal as compared with 5,047,385 tons in the previous twelve months. In this total, the trade in bunker and export coal showed an increase of 179,565 tons. As South Africa is selling coal at probably the lowest price in the world to-day at the pit-head, it may seem surprising that the increase was not far greater, but Mr. Black enumerated several adverse factors that are accountable for it. Among these were the restrictions imposed by the British Government, and the fact that the ocean trade at the present time is in effect governed by the availability of ships. Mr. Black opined that, until the termination of the war, the trade must necessarily be influenced by the high freightage ruling, and the uncertainty of transport. He also emphasised the fact that both the export and bunker business is contracted for in advance for fixed periods and at very low prices, the object of the Associated Collieries being to expand and foster the trade, with a view to the future, and despite the difficulty of obtaining supplies and the rise in prices of all commodities, "the collieries have faithfully carried out their obligations in this respect." Mr. Black went on to point out that the S.A. Railways have been able to increase their rates for bunker coal by 6s. per ton of 2,000lbs. to the ports, thus adding approximately at the rate of an additional million and a half pounds or more per annum to the railway revenue. He had something to say, however, regarding the methods of the Railway Administration in raising the rate on bunker coal. "Whilst we rejoice," he said, "that the State revenue is thus augmented without any dislocation to the trade during the war, it should be recognised that when we return to the normal condition of things, a high railway rate for bunker coal could not be maintained without serious injury to such trade at the South African ports. The increased railway rate was suddenly brought into operation at but a few days' notice, and no opportunity was afforded the collieries to place their point of view before the Administration." To our mind, Mr. Black put the matter very moderately indeed. One would reasonably have expected the Railway people to take the coal owners into confidence before making so momentous a change. Mr. Black added a reminder in regard to the fortunate position of the coal consumer here compared with elsewhere. "Throughout this protracted war, the Associated Collieries have supplied consumers without raising the price of coal; and all important industries, both at the coast and inland, have been served at pre-war rates. At a time when in every part of the world the price of coal has been enormously increased, that of the Transvaal has remained practically unchanged; yet every item of stores and food supplies has increased materially out here, and is costing the collieries in many instances, as much as 100 per cent. to 200 per cent. above those ruling prior to the war. One cannot but feel that neither the public nor the Press has sufficiently appreciated the fortunate position of South Africa in this respect; it has simply been taken as a matter of course." It is well occasionally to be thus reminded how much South Africa owes to her freedom of the seas and favourable position.

THE BRAKPAN LEASE SCHEME.

Plans for Working the New Ground—Consulting Engineer's Report.

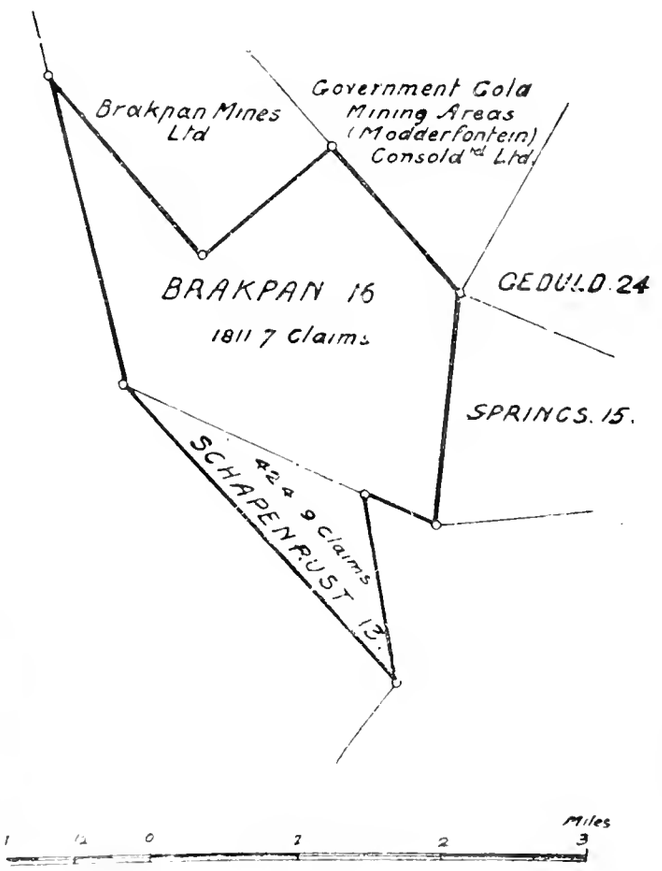
A CIRCULAR has been issued to the shareholders of the Brakpan Mines, Ltd., informing them that their company's tender for the Brakpan Lease Area has been accepted by the Government. Under the existing agreement with the Consolidated Mines Selection Company, Ltd., whereby the Rand Selection Corporation has the right to participate up to 25 per cent. in any new mining venture or mining business in South Africa which that company shall acquire, the Corporation has exercised its right of participating to the extent of 25 per cent. in the issue of 100,000 shares in the Brakpan Mines, Ltd., to the Consolidated Mines Selection Company, Ltd., at £5, viz., 25,000 shares, and also in the guarantee to loan to the Brakpan Mines, Ltd., the sum of £250,000, the participation of the Corporation being £62,500. As one of the guarantors, the Corporation is entitled to a commission of 5 per cent. on its proportion of the loan, amounting to £3,125. This commission is payable on January 1, 1918. The Schapenrust claims included in the amalgamation scheme were purchased by the Consolidated Mines Selection Company, Ltd., and the Rand Selection Corporation accepted a participation of 25 per cent. in this business. Shareholders of the Corporation will, therefore, participate in the consideration to be paid by the Brakpan Mines, Ltd., for the Schapenrust claims to this extent. The Brakpan Mines circular states:—Attached hereto is a report by your Consulting Engineer setting forth the technical details in connection with the tender, from which it will be seen that, under the scheme of exploitation and extension of the reduction plant, an amount of approximately £850,000 will be required to carry out the work foreshadowed. This amount will be provided as follows:—

Brakpan Mines, Ltd., will set aside out of its undistributed profits (after providing for the final dividend for the year 1916) a sum of ...	£100,000
An agreement was concluded on October 20, 1916 (when Brakpan shares were quoted at 87s. 6d.), whereby the Consolidated Mines Selection Company, Ltd., purchased from Brakpan Mines, Ltd., 100,000 Brakpan Mines, Ltd., shares at £5 ... ... (Note.—The directors, under the Articles of Association, have power to increase the capital of the company to £850,000 by the issue of 100,000 shares.)	500,000
The Consolidated Mines Selection Company, Ltd., guarantees to lend to Brakpan Mines, Ltd., as and when required by the latter, but not prior to the exhaustion of the aforementioned sums of £100,000 and £500,000 respectively, a sum up to but not exceeding (Interest to be at the rate of 1 per cent. above the Bank of England rate for the time being, with a minimum of 5½ per cent.)	250,000
	£850,000

By way of consideration for the guarantee, the guarantors will receive 5 per cent. commission on the loan of £250,000 only, such commission to be payable on January 1, 1918. In terms of the agreement, the Consolidated Mines Selection Company purchases and takes up immediately 10,000 Brakpan Mines shares, the balance being taken up as an whenever called by the Consolidated Mines Selection Company, or whenever Brakpan Mines shall require further funds to meet capital expenditure. The consideration to be paid by this company for the Schapenrust claims is similar to that provided for in the agreement between the Government and the East Rand Central Mines, Ltd., viz., the payment from time to time shall bear the same relation to the amount of profits (excluding profits tax) to be paid to the Union Government in respect of the combined area as the figure 18 bears to 82, or 21·95 per cent. That is to say, during the first five years the Government's proportion of net profits being 5 per cent. per annum, the amount payable in respect of the Schapenrust claims would be 1·1 per cent., and thereafter be equivalent to 21·95 per cent. of the amount payable to the Government under the sliding scale. In regard to the loan of £250,000, this can only be drawn upon after the £100,000 and £500,000 previously mentioned shall have been expended, and is repayable in four yearly instalments, the first being due and payable two years after the date of the last advance being made by the Consolidated Mines Selection Company, but in any case not later than the 1st day of January, 1921. During the first five years, unless unforeseen circumstances—such as strikes, shortage of native labour, or abnormal increase in working costs due to war—occur, the present rate of dividend should at least be maintained.

ENGINEER'S REPORT.

The Consulting Engineer, in the course of a report on the scheme in mind for working the Government Lease on the farm Brakpan No. 16 in conjunction with the Brakpan

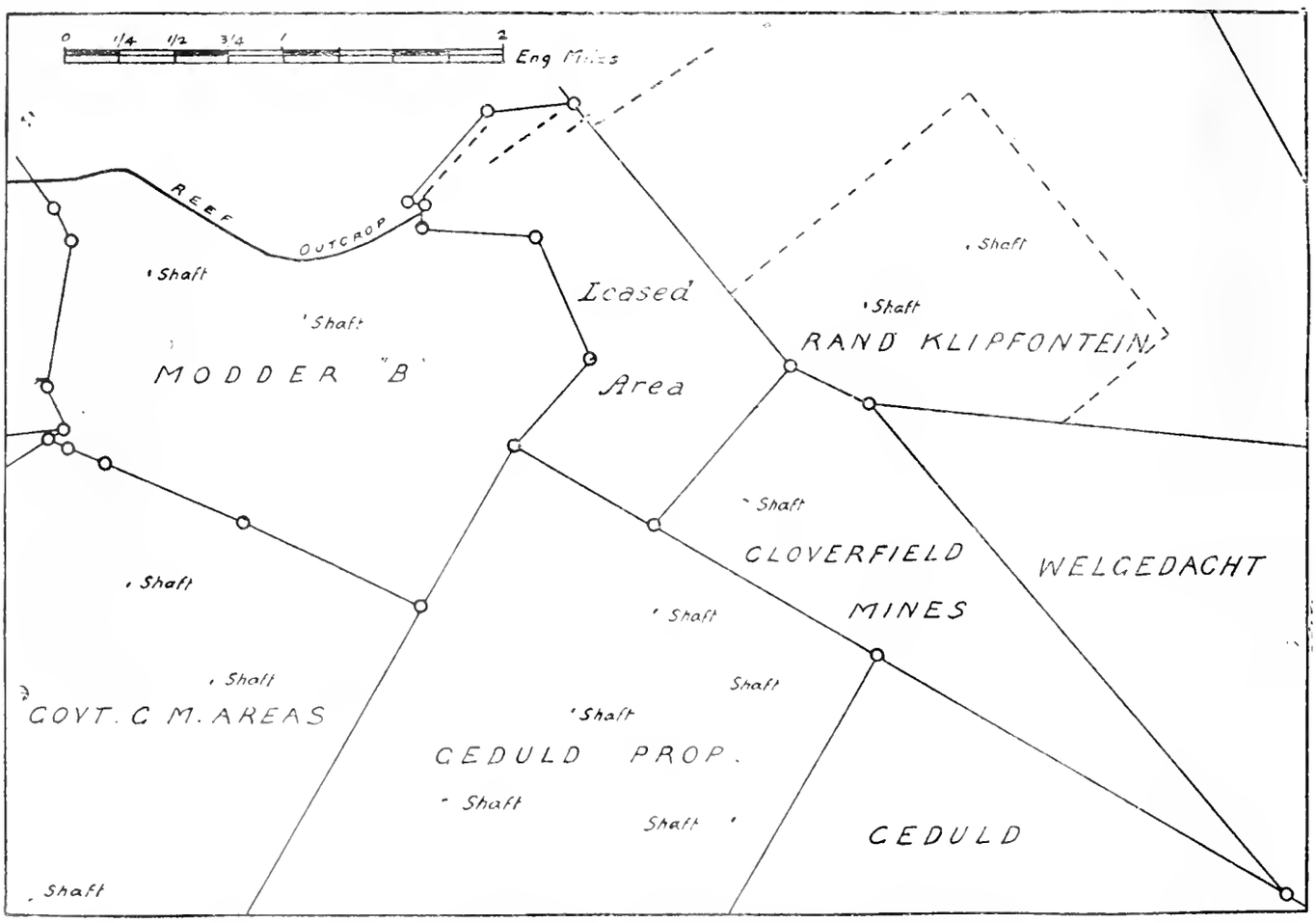


Mines, says:—Milling capacity: The eventual milling capacity of the amalgamated property will obviously depend upon the conditions disclosed by future development, but it is felt that the above scheme of exploitation is sufficiently comprehensive to deal with large tonnages efficiently and economically. The present milling capacity of the Brakpan Mines is nominally 60,000 tons per month. It is proposed to double this capacity, to become effective five years hence, when No. 3 shaft will have been completed, and the ore reserve increased sufficiently to enable this rate of tonnage to be produced. In the interim period it is hoped that the monthly tonnages will show a gradual increase. With this in view, orders for additional plant, enabling a total of 70,000 tons per month to be milled, will be placed at once, the idea being that the maximum tonnage shall always be dealt with, consistent with the labour position from time to time. By the acquisition of the additional claim area,

the estimated life of the mine as from January 1, 1917, is practically doubled on the basis of double the present milling capacity coming into operation five years hence. The Government's participation under various ratios of net profit to recovery is as follows:—

Ratio of net profit to recovery.	Government's participation.
10 per cent.	12·5 per cent.
15 ,, ,, ...	12·5 ,, ,,
20 ,, ,, ...	12·5 ,, ,,
25 ,, ,, ...	12·5 ,, ,,
30 ,, ,, ...	12·5 ,, ,,
35 ,, ,, ...	17·1 ,, ,,
40 ,, ,, ...	21·3 ,, ,,
45 ,, ,, ...	24·4 ,, ,,
50 ,, ,, ...	17·0 ,, ,,

It will be found upon analysis that the above sliding scale provides for increased profits earned in consequence of a reduction of working costs being divided equally between the Government and the company, whilst increased profits due to increased grade will be divided in the proportion 38·5 per cent. to Government and 61·5 per cent. to the company. The future prospects of the company must naturally depend upon the development disclosures in the unexplored claim area, but it may be stated that on the average conditions so far disclosed by the Brakpan Mines, and on the basis of double the present milling capacity, after five years the distributable profit per annum should then show an increase equivalent to more than 50 per cent. over than now obtaining, and this for a period estimated to be about two and a half times that which would have obtained had the additional area not been acquired.

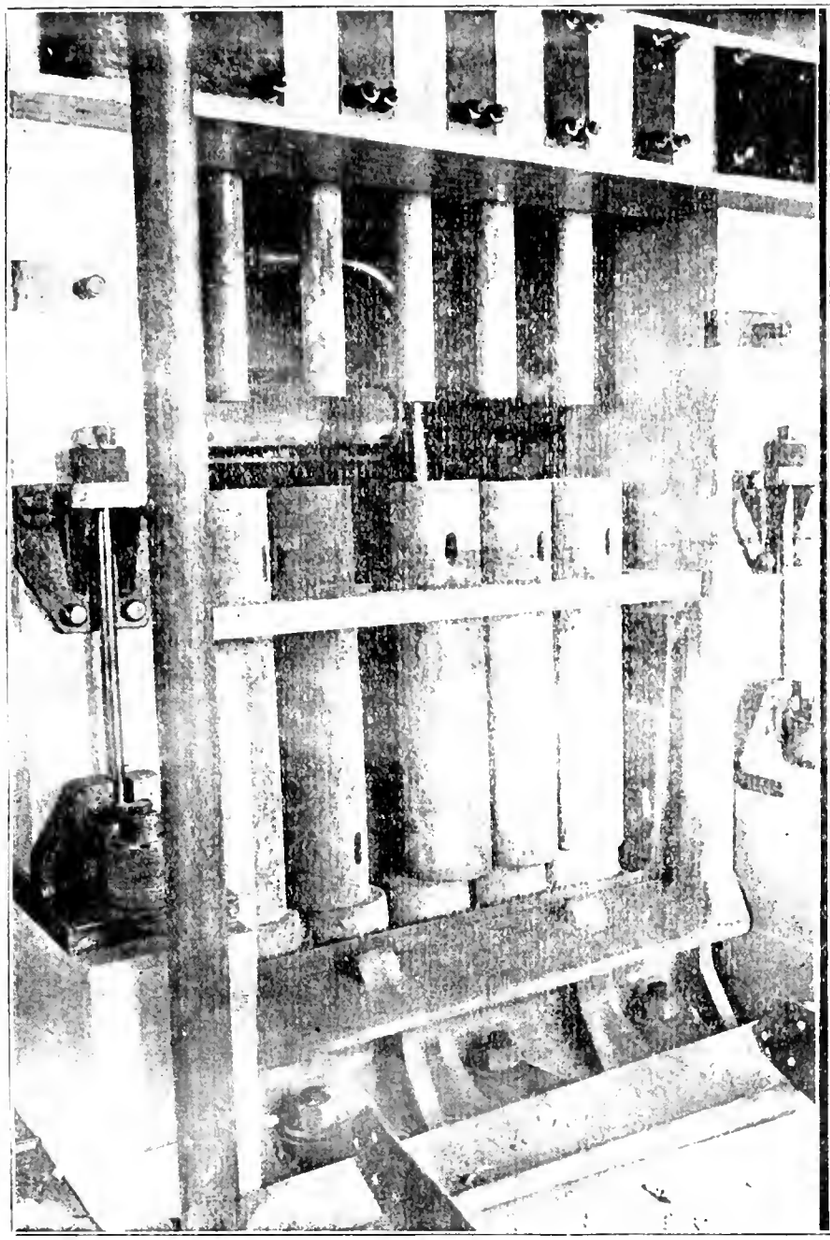


Plan showing Modderfontein Leased Area and adjacent Claims.

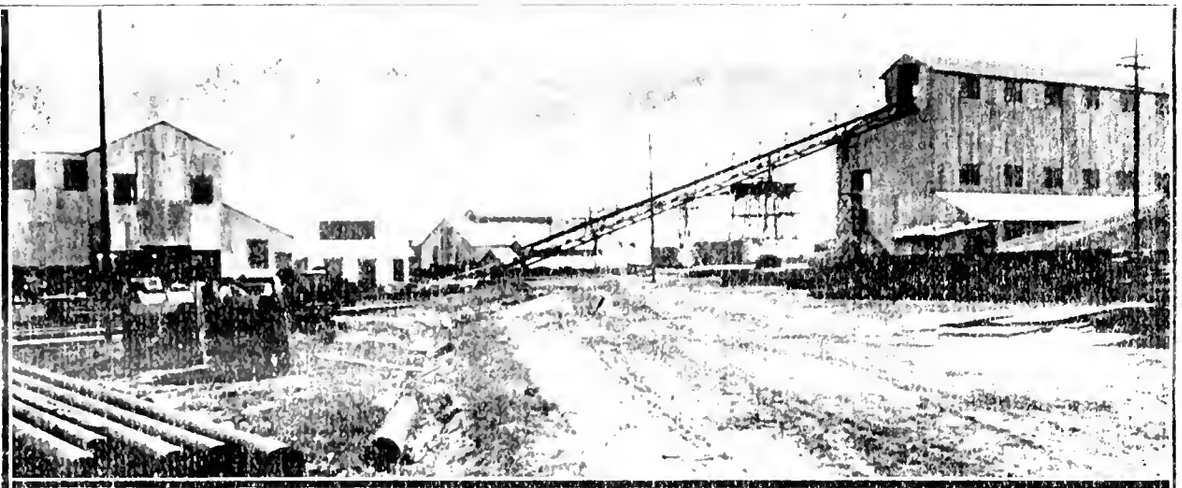
The Year with Breyten Collieries.

The report of the directors of the Breyten Collieries for the year ended 31st October, 1916, to be submitted at the general meeting to be held on the 15th December, 1916, shows that cash on hand at 1st November, 1915, was £866 5s. 7d.; profit from operations was £9,955 16s. 7d. Expenditure on equipment of property, etc., was: Additions to screening plant approach, £1,912; additional Reid locomotive, £3,000; additions to boiler plant, £691; boiler feed purification plant, £207; coal cutters and boring machines, £965; steam plant No. 5 haulage, £484; collecting haulage, No. 2 adit, £489; underground haulage plant, equipment of No. 5 adit, £1,973; general underground plant, No. 5 adit, £975; house for assistant secretary, £219. Less dividends paid: Dividend No. 6 of 7½ per cent., declared 14th December, 1915, £6,750; dividend No. 7 of 5 per cent., declared 28th June, 1916, £4,500. The balance was £11,107 18s. 5d. The superintending Engineer, in his annual report writes: The coal in the face of each of the three main adits from which the output is obtained is still of normal quality. The footage driven during the year amounted to 25,015 feet, or an increase of 1,010 feet over the previous year, while 561½ feet of sinking was accomplished, as compared with 131 feet for the previous year. In order to facilitate the handling of the coal the gantries have been extended to provide for a third haulage way. The boiler plant has been increased by the equivalent of 250 h.p., and a water purifying plant installed in order to minimise the deposition of sediment in the boilers. An additional Reid locomotive has been acquired from the South African Railways, and ten more Siskol coal cutters purchased. The output has been restricted during the past few months on account of the shortage of boiler feed water, due to the continued drought. The capacity of two of the dams on the property is being increased to provide further storage capacity.

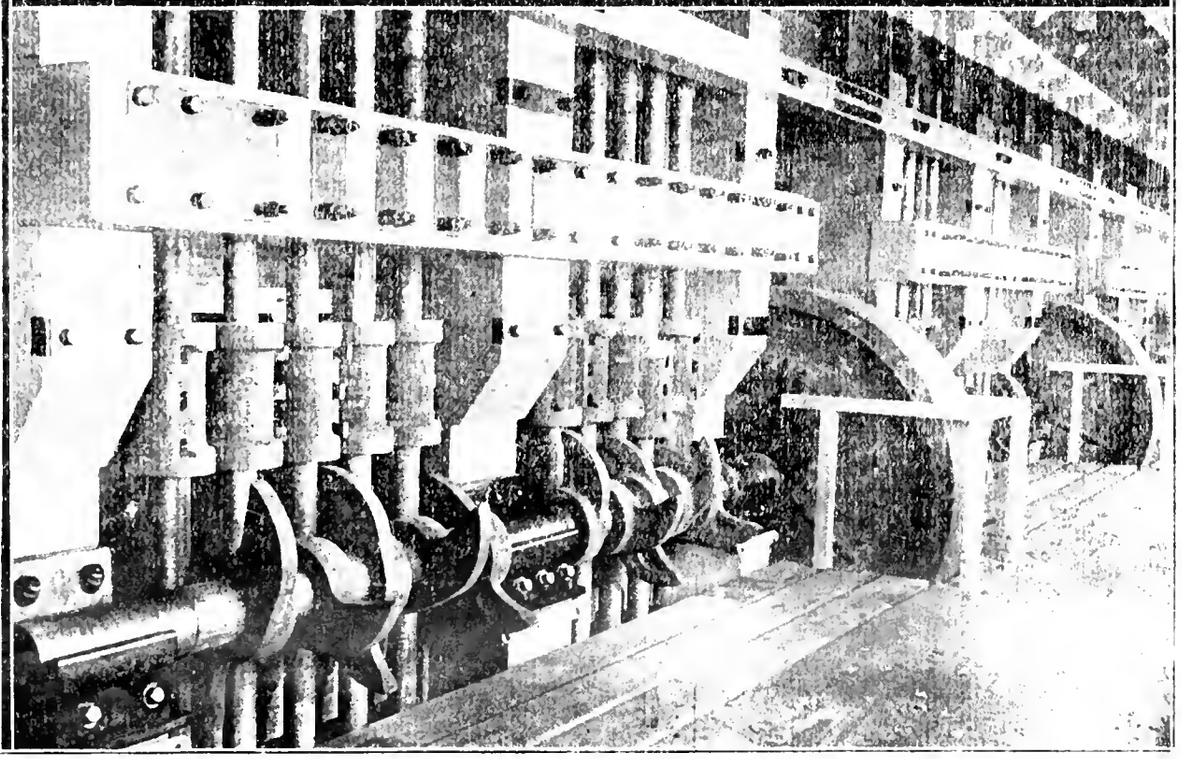
THE SPRINGS MINES MILL.



FIVE OF THE STAMPS: SPRINGS MINES MILL.



THE SPRINGS MINES MILL.



CAM SHAFT FLOOR: SPRINGS MINES MILL.

THE WEEK IN THE SHAREMARKET.

Far East Shares in Demand— Recovery and a Setback.

In anticipation of the result of the new area tenders, Brakpans and Mines Selections were freely bought last week at advanced rates. Rand Klips were also in demand. At the opening on Saturday morning there was a big business in Brakpans, Mines Selections and Rand Klips. At the call prices steadied somewhat as the demands became satisfied. The net results show profits all along the line in the active stocks, with the exception of Bantjes. Later on prices receded in most of the stocks that had been rushed. Monday morning's call brought a further relapse in all the stocks belonging to the lucky winners and the smaller fry that are to share in the spoil. Saturday's position was exactly reversed. Then, only one stock was to the bad; to-day one only was to the good, viz., Van Ryn Deep. Prices declined still further in the course of the afternoon. Tuesday morning brought no improvement, and it looks as if those who had rushed blindly into the Selection lot were beginning to realise that they had nothing definite to go on, and came to the conclusion that the value of Brakpans, for instance, was nearer 94s. than 101s. At the opening 97s. 6d. however was bid. Bantjes got the knock also, though it is quite on the cards that some other rumour will send them up again in the course of the next few days. Prices eased off again from after the call to the close. On Wednesday morning an attempt was made to strengthen Brakpans, but on the call they fell to sellers at yesterday's figure. The "area" stocks showed no improvement on closing prices, while Springs and Sub Nigels both lost further ground. Modder Deeps hardened and are again about level with Modder Bs. City and Suburbans were better, and a small spurt carried Zaaiplaats to 6s. 3d., but it was of short duration. The market firmed up slightly during the afternoon. On Thursday morning prices generally were maintained with very little actual business. Zaaiplaats enjoyed another small flutter, and this time kept their advance. In view of the apparent seriousness of the military position in Roumania and Greece and the political crisis in England it is as well to remind pessimists that if things were anything like as bad as they imagine them to be, the share market would very speedily respond. The continued firmness proves conclusively that those in the know do not consider the position to be over-serious. The local setback this week was, of course owing only to the blind rush after unknown quantities. A good many fingers have been burnt, but that is purely an individual trouble and does not affect the real situation in the slightest degree.

The market closed firm on Thursday and opened somewhat irregular on Friday, at the call the popular stocks being generally weaker. The following sales were booked: Mines Selections, 22s.; Geduld Props., 12s. 3d.; Government Areas, 51s. 6d.; Kleinfonteins, 23s. 6d.; Sub Nigels, 21s. 6d.; Springs, 57s. 9d.; Van Ryn Deeps, 70s. These all show losses. New Eras at 9s. 8d. were to the good; and so were also Randfonteins at 11s. The remaining stocks were unchanged. Business in outside goods this week omitted the Henderson lot altogether, and gave very scanty support to Daggafontein, the options standing at about 8s. and the old shares in the neighbourhood of 10s.; South Van Ryns are quoted at 6s. 9d. to 7s.; Verdites at 1s. 10d. to 2s.; Phoenix at 10d. buyers; and New Areachaps sales at 7s. 6d.

	Fri. 1st.	Sat. 2nd.	Mon. 4th.	Tues. 5th.	Wed. 6th.	Thurs. 7th.
Alcock Farms	7 10*	8 0†	8 0†	7 6*	7 6*	7 6*
Apex Mines	6 6*	6 9	7 6		7 0†	—
Bantjes Cons.	12 9*	12 6	12 6	11 4	10 10	11 3*
Brakpan Mines	95 0	100 0	96 0*	91 0	92 0*	92 6*
Brighton Collieries	—	20 0†	18 0*	—	20 0†	—
Brick and Potteries	5 0*	5 0*	5 0*	5 0*	5 0*	5 0*
Bushveld Tins	0 3*	—	0 3*	0 3*	—	0 4*
Cinderella Cons.	6 0†	—	—	—	6 0†	—
City and Subs.	37 0*	37 0*	37 0*	37 3*	38 0*	38 0*
City Deeps	83 6*	84 0*	84 0*	84 6*	84 6*	84 6*
Cloverfield Mines	9 6	10 1	9 5	9 2	8 9*	8 10*
Clydesdale Colls.	—	12 0*	12 0*	12 3*	13 0*	12 6*
Concrete Construct.	—	—	—	2 0†	2 0†	2 0†
Con. Investments	—	20 0†	19 6†	—	—	20 0†
Con. Langlaagtes	28 6*	28 6*	28 9	28 6*	28 6	28 0*
Con. Main Reefs	18 0*	18 9	18 9	18 9*	18 6*	18 0*
Con. Mines Select.	23 9	24 3	23 6	23 0	22 0	22 6
Coronation Colls.	—	32 6*	32 6*	—	32 6*	—
Coronation Freeholds	—	—	0 4†	0 3†	0 3†	—
Coronation Synd.	—	—	2 0*	—	—	—
Crown Diamonds	2 3*	2 3*	2 0*	2 0*	2 6*	3 0*
Crown Mines	60 0*	60 0*	60 0*	60 0*	—	—
E.R. Centrals	8 6*	9 6*	10 0	9 6*	9 0*	9 3*
E.R. Coals	2 4*	2 4	2 5	2 4*	2 3*	2 4
E.R. Deeps	1 1*	1 1*	1 1*	1 1*	1 1*	1 1*
E.R. Proprietary	12 6*	—	—	—	12 6a	—
Eastern Golds	1 4	1 4*	1 3*	1 3*	—	1 3*
Ferreira Deeps	—	—	—	30 0†	30 0†	30 0†
Frank Smith Dnds.	3 7	3 8	3 7*	3 7	3 6*	3 6*
Geduld Props	42 6*	43 0	42 6*	42 6*	42 6*	42 3*
Glencoe Colls	10 6*	10 6*	10 6*	10 6*	10 6*	10 6*
Glynn's Lydenburgs.	15 0†	15 0†	15 0†	—	15 0†	15 0†
Govt. Areas	51 9	52 0	51 9	52 0	51 9	52 0*
Jupiters	7 0*	7 10	7 9	7 6*	7 6	7 0*
Knight Centrals	9 7	9 5	9 3	9 1*	8 10	9 1*
Knights Deeps	25 0†	—	—	—	25 0†	—
Lace Props	5 2	5 6	5 5	5 3*	5 3	5 3*
Luipaardsvlei Est	—	—	7 0*	7 0*	—	—
Lydenburg Farms	6 0	6 6	6 6	6 8	6 9	6 11
Main Reef Wests	3 6*	3 6*	3 8	3 9†	3 6*	3 6*
M.R. West Debents.	—	—	—	£50†	—	£50†
Meyer and Charltons	105 0*	105 0*		—	115 0*	—
Middelvlei Est	—	1 0*	1 0*	1 0*	—	1 2*
Modder B's	148 6	147 0*	145 6*	146 0	145 0	144 0*
Modder Deeps	143 6*	145 0	—	143 0*	144 6	—
Leeuwpoort Tins	13 0*	13 9*	13 9*	13 9*	13 0*	13 9†
Natal Nav. Colls.	—	19 0*	19 0*	20 0*	19 9*	20 0*
New Boksburgs	1 7*	1 6*	1 7*		1 7*	—
New Eland Dnds.	15 0*	16 0*	17 0*	18 6	20 0†	—
New Era Cons.	9 10	10 6	10 0*	10 3†	9 3	9 3*
New Geduld Deeps	5 8	5 8*	5 10*	5 10*	5 10*	5 10*
New Gochs	—	—		12 0†	—	—
New Heriots	—	—	50 0†	47 0†	—	—
New Kleinfonteins	24 0	24 0	23 9	23 8*	23 6*	23 9
New Modders	375 0*	375 0*	377 6	—	380 0*	380 0†
New Rietfonteins	0 9*	0 9*	0 9†	0 9*	0 9*	0 11*
Nourse Mines	—	20 3*	20 0*	19 6*	19 0*	21 0†
Pretoria Cements	77 6*	78 0	80 0†	79 0†	80 0†	80 0†
Princess Estates	1 10*	1 9*	1 10*	1 9*	—	1 7*
Rand Collieries	2 0*	—	—	—	2 0*	—
Rand Klips	10 6	11 5	10 1	10 1*	9 0	9 9
Rand Nucleus	1 6*	1 6*	1 6*	1 6*	1 6*	1 6*
Randfontein Deeps	4 0*	4 0*	4 6*	4 9*	4 10*	5 0
Randfontein Est.	—	13 0			13 0†	13 3
Roberts Victors	11 6*			—	—	—
Rooibergs	9 0*	10 6†	9 0*	10 6†	10 0†	9 0*
Roodepoort Uniteds.	9 0*	9 0*	9 0*	10 0†	8 0*	10 0†
Ryan Nigels	—	2 6*	2 6*		—	—
Sheba	—	1 3*	1 3*	1 3*	1 3*	1 3*
Simmer Deeps	4 3*	4 3*	4 3*	4 3*	4 4†	4 4†
S.A. Breweries	28 0*	29 6*	29 6	28 6*	29 0*	28 6*
S.A. Lands	4 8	4 9	4 10	5 2	5 0	4 10*
Springs Mines	61 0	62 0	61 0	60 6	59 0	59 0
Sub Nigels	24 6	26 0	25 6	25 6*	24 9	25 0*
Swaziland Tins	—	—	30 0†	—	30 0†	30 0†
Rand Selections	73 0	75 0	73 0	71 9	68 9*	68 6*
Transvaal Lands	—	12 6*	—	—	—	15 0†
Trans. G.M. Est.	18 0*	19 0†	17 6*	17 0*	15 6*	16 0*
Van Ryn Deeps	69 3	70 0*	70 3	70 6*	70 6	70 9*
Village Deeps	29 0†	29 0†	29 0†	29 0†	29 0†	29 0†
Village Main Reefs	—	—	16 0	—	—	—
Vogel Con. Deeps	—	1 0*	—	1 3*	1 3*	1 3*
Welgedacht	—	—	30 0†	30 0†	—	—
West Rand Cons.	—	7 6†	—	7 6†	7 6*	—
Western Rand Est.	—	1 9†	1 6*	—	1 6*	—
Witwatersrands	—	54 0†	—	—	—	—
Wit. Deeps	—	19 0*	18 6*	20 0†	18 6*	18 3*
Wolhuters	9 6*	9 9	9 6*	9 6*	9 6*	9 6*
Zaaiplaats Tins	4 9	4 9	4 11	5 0	6 0	6 1
Union S.A. 5 p.c.	£99¾*	£99⅞	£99½*	£99¾	£99 15 6*	

*Buyers. †Sellers. aOdd lots. nEx London.

RECOMMENDATIONS OF THE INDUSTRIAL RESEARCH COMMITTEE.

A Separate Department Wanted—A Survey of Natural Resources—Important Questions Raised.

At the last meeting of the South African Institution of Engineers, the President communicated the following from the Council:—The Council was now in a position to report upon the progress made by the Industrial Research Committee, which, they would recollect, was representative of the various scientific and technical institutions in this country, and was formed as the outcome of a joint conference of the Councils of those institutions held in this town on June 8th, 1916. The Industrial Research Committee appointed an Executive Committee, which had been busily engaged in formulating proposals for submission to the Minister of Mines and Industries relative to the organisation which should be set up for dealing with the important question of scientific and industrial research. The Executive Committee appointed a number of sub-committees, composed of the representatives of the various technical institutions, these sub-committees having power to add to their numbers. The sub-committees submitted valuable reports with regard to the organisation and scope of industrial research and, emanating from these reports, unanimous recommendations were submitted by the Industrial Research Committee to the Minister of Mines and Industries. These recommendations might be summarised as follows:—(1) That a separate Department of Industries and Commerce should be constituted in South Africa, one of its main functions being the furtherance of industrial research. (2) That a permanent Head of this Department be appointed with the necessary staff, and that, in addition to the Advisory Board already appointed by the Government, a Technical Board should be constituted, composed of scientific and technical men. That this Technical Board should direct the policy of the research section of the Department and stand responsible for the scientific and technical soundness of projects recommended for Government support. That all proposals for research should stand referred to this Technical Board. (3) That one-half of the members of the Technical Board should be nominees of the Government of the Union, the other half being nominees of the scientific and technical institutions of South Africa. That all members of this Technical Board should be chosen for their scientific or technical experience in industries. (4) That the Technical Board should in the first instance comprise eight members, exclusive of the Head of the Department, and should have power to refer sections of its work to sub-committees not necessarily composed of its own members. (5) That the Research Section of the Department should collaborate with similar institutions throughout the Empire and, in addition to its other duties, should organise at once the carrying out of an economic survey of the resources of South Africa and a scheme for industrial and scientific standardisation. Prior to submitting these definite recommendations, the Executive of the Research Committee met the Minister of Mines and Industries at his request. The Minister expressed his keen sympathy with the objects in view, and the Committee recorded its opinion that a permanent Government Department should be established with a qualified technical chief, competent to co-ordinate and develop the work of research and to utilise to best advantage the technical and scientific ability available in the country. The Committee promised to submit formulated recommendations without delay, and a further meeting with the Minister took place on October 7th to discuss the recommendations that had been submitted. The Minister suggested that as a temporary measure the Research Committee should appoint a representative to act on the Advisory Board of Industries and Commerce, with the object of enabling recommendations to be brought forward through the channel created for such purpose. Professor Stanley was accordingly nominated to act in this capacity, and on October 24th the Executive Research Committee met a sub-committee of the Advisory Board to discuss the recommendations. A further meeting had since been held, and it was hoped that a decision would not be long delayed. He felt sure that all members of this Institution would be generally in accord with the views of the Research Committee as expressed in the recommendations submitted to the Union Government. It would, he thought, be difficult to exaggerate the far-reaching influence which the steps in contemplation might have upon the future of this country, and he would like to take this opportunity of emphasising one or two points which to him appeared to be of special importance. In the first place, it must be remembered that when they spoke of research, they intended to embrace a much wider field than was usually covered by that term, which might be understood as applying merely to purely scientific or laboratory investigation. The scope of the work was really that of industrial development and must include, amongst others, the following important questions:—(1) The co-ordination as far as possible of all industrial research in South Africa, and the collection and dissemination of data bearing on the subject. (2) Co-operation with similar departments in the United Kingdom and the other dominions to obtain information already available (including their practice and procedure), in order to avoid overlapping and to take advantage of facilities for research not available in this country. An important feature would be the acquisition and utilisation in arts and manufactures of knowledge already existent elsewhere in countries more highly developed industrially than South Africa. (3) The preparation of an economic survey of the natural resources of South Africa and the furnishing of advice in regard to the best method of utilising such resources and to industrial problems. (4) Methods for inducing industrial improvements and for facilitating and encouraging manufacture in suitable localities, as, for instance, by carrying out investigations or furnishing advice in a manner similar to that in which the Agricultural and Irrigation Departments assisted farmers. (5) The co-ordination of various industries to obtain the best combined results and the exchange between user and manufacturer of manufacturing improvements and operating experience. The chief

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executive officer of a department exercising such wide and important functions must clearly be possessed of organising capacity and experience of industrial technology. He must also have a sufficiently wide scientific knowledge and breadth of view to appreciate the relative value of the various matters with which he had to deal. If one looked at the problem in this broad light, it would be realised that the Department of Industries should in time become a clearing-house for information and advice, co-ordinating effort in various branches of work, co-operating with other dominions of the Empire and directing industrial development to obtain maximum efficiency and maximum progress. To his mind one of the most pressing matters at the moment was the preparation of an economic survey of the resources of the country, because until full knowledge was obtained as to the quality and quantity of materials available, their geographical relationship to one another and to sources of power and their accessibility to the market for finished products, it was impossible to gauge the prospects of any particular enterprise. Whilst the preparation of this survey should not be allowed to interfere with some amount of research which could no doubt be immediately undertaken in certain directions, progress would, he feared, be seriously handicapped unless this survey was expeditiously completed. To achieve success, it was essential that scientific and technical knowledge and experience should be given an effective voice. In laying the foundations for progressive industrial development in this young country, it would indeed be a calamity if full advantage were not taken of the experience of older continents where administration had sometimes failed adequately to realise the enormous extent to which national development under modern conditions was dependent upon the application of science and scientific methods. Conversely, they should not neglect to study the methods adopted in countries such as Japan, where a purely agricultural country had been developed industrially with conspicuous and rapid success. He was confident that he would be expressing the views of members when he said that they as technical men fervently trusted that the Government of this country would see to it that the organisation it was about to establish was designed to utilise to the fullest possible extent the expert assistance and advice which technical men and technical institutions were ready and anxious to provide.

Union Customs Statistics.

The following return shows the value of imports and exports into and from the Union of South Africa for the eight months ended August 31, 1916, as compared with the corresponding period of 1915:—

IMPORTS.

	1916. (8 months.)	1915. (8 months.)
Via—	£	£
Cape Province	14,406,[illegible]	10,569,494
Capetown (parcels post)	571,132	295,161
Natal	9,185,284	5,718,399
Delagoa Bay	1,354,432	1,395,682
Rhodesia	162,221	111,340
Total merchandise	25,067,115	18,090,076
Articles for S.A. Government	1,133,719	1,820,513
Specie	[illegible]	1,823,476
Grand totals	27,222,721	21,834,065

EXPORTS.

	£	£
Diamonds	2,422,338	393,261
Other South African produce	10,087,706	8,601,486
Total South African produce	12,510,044	8,994,747
Imported goods re-exported	1,488,121	961,922
Specie	129,791	126,901
Grand totals	14,127,956	10,083,570

Figures relating to the export of raw gold will not be available until the cessation of hostilities. The following is a return of values of Union imports, exports and gross duty received during the month of October, 1916, together with a comparison with similar items for October, 1915:—

	Oct., 1916.	Oct., 1915.
Value of imports	£3,750,381	£3,295,900
Value of exports	1,245,591	1,943,314
Gross revenue duty	564,[illegible]	446,877

To include articles imported by South African Governments. †Does not include gold not exports to Rhodesia.

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Legal Decisions Affecting Mining.

A considered judgment was given this week at a special sitting of the Transvaal Provincial Division of the Supreme Court in the matter of the Turffontein Estate and G.M. Co. v. the Acting Mining Commissioner of Johannesburg. The case stated was one in which the plaintiff company claimed that it was entitled to include in its mynpacht certain portions of the farm, formerly laid out as townships, which were, however, cancelled in 1913. It was contended that, although these particular portions of Turffontein were impressed with the character of township land prior to December 27, 1913, after that date they formed an ordinary part of the farm upon which the plaintiff company was entitled to have a mynpacht. The defendant contended that, when the 1908 Gold Law came into force, those portions were subject to Act 18 of the Gold Law of 1898, and that therefore, at the date, the sole right to mine for minerals under the surface of those portions vested in the State, and that, by no act of the plaintiff company, could the State be divested of that right, and, as the State alone was entitled to dig for minerals under those portions, no mynpacht could be granted. In the course of his judgment, Mr. Justice Mason said it was clear that the policy of the Gold Law ever since 1885 was to prevent the public, not only from digging for minerals, but also from prospecting for them underneath certain places, either for sentimental reasons or for reasons of public safety. Whether those places were situated on a public proclaimed field or not made no difference to the prohibition, which was complete. As the industry increased people began asking themselves why the gold in those places should be left undeveloped if the extraction could be carried on without shocking sentiment or endangering public safety. All the gold underneath was vested in the Government, and they had the right to determine where digging could take place. The Volksraad was prepared to allow the gold underneath these excluded places to be exploited, provided the owner of the surface shared in the profit. There was no reason for the legislation of 1908 to confine the Government's rights to dig underneath townships, to those on proclaimed fields. In 1908 what was to be done with the proceeds was left in abeyance. There was nothing in Chapter VI. to limit the prohibition, to prospect and to dig, to those townships which were situated on a proclaimed area. It was therefore held that the stated case must be answered in favour of the defendant with costs. Sir J. Wessels and Mr Justice Gregorowski concurred.

Tenders are being invited for the installation of electric light in the Township of Vereeniging.

DE BEERS GENERAL MANAGER'S REPORT.

Detailed Statement of Mining Operations for the Year.

The following is the report of the General Manager of De Beers:—I beg to submit for your consideration this, the general manager's twenty-eighth annual report on the mining operations of the company, being for the year ended 30th June, 1916. As mentioned in last year's report, all work was suspended in August, 1914, and this report deals with another year of abnormal conditions caused by the continuance of the war in Europe. No hoisting was done from De Beers, Kimberley, and Dutoitspan Mines. The quantities of blue ground in sight and the depths of the shafts at the aforementioned three mines remain the same as at the end of the previous year, but the figures are repeated in this report for convenience of reference. Mining operations were resumed at Wesselton Mine on the 23rd May, and at Bultfontein Mine on the 31st May. Washing operations were resumed at Wesselton and Bultfontein floors on the 3rd January, and at Dutoitspan floors on the 24th May. No mining costs are shown for Wesselton and Bultfontein Mines, as operations were not started until towards the close of the financial year, and, for the same reason, no washing costs are shown for Dutoitspan floors.

De Beers Mine.

The mining of blue ground in this mine was suspended on the 31st July, 1908, and has not yet been resumed. No development work was done during the year. Pumping was continued throughout the year, the average quantity of water pumped from the mine being 2,726 gallons per hour. The quantity of blue ground in sight above the 2,040 foot level is estimated to be 2,750,000 loads. The depth of the Rock shaft is 2,640 feet. The depth of No. 1 shaft is 1,728 feet. No blue ground was washed during the year, and the stock remains at 48,396 loads.

Kimberley Mine.

No hoisting was done during the year. No reef and blue mixed was hoisted during the year. The quantity of blue ground in sight above the 3,520 foot level is estimated to be 2,000,000 loads. The average quantity of water pumped from the mine was 6,086 gallons per hour. No development work was done during the year. The depth of the Main Rock shaft is 3,601 feet. The depth of the Atkins shaft is 1,009 feet. The average depth of the open mine is 1,200 feet from the surface, and 897 feet from the top of the hard rock. The deepest point is 1,300 feet from the surface. No blue ground was washed during the year. No reef and blue mixed was washed during the year, and the stock remains at 571,176 loads.

Wesselton Mine.

The output of blue ground was 43,586 loads, as follows: 500 ft. level, 605 loads; 540 ft. level, 610 loads; 580 ft. level, 3,004 loads; 620 ft. level, 3,030 loads; 660 ft. level, 3,210 loads; 700 ft. level, 6,434 loads; 740 ft. level, 8,813 loads; 780 ft. level, 8,760 loads; 820 ft. level, 5,339 loads; 860 ft. level, 2,105 loads; 900 ft. level, 1,016 loads; 940 ft. level, 286 loads; 980 ft. level, 371 loads. 1,004 loads of reef or waste ground were also hoisted. Hoisting was done from the 980 ft. level. We have in sight above the 980 ft. level 15,738,000 loads. It is estimated that between the 980 ft. level and the 1,550 ft. level there are 22,000,000 loads. The average quantity of water pumped from the mine was 13,895 gallons per hour. No development work was done during the year. The depth of No. 1 main rock shaft is 1,119 ft. The depth of No. 2 main rock shaft is 1,667 ft. The stock of blue ground at the end of last year was 3,148,845 loads; 43,586 loads were deposited, and 885,331 loads were washed, leaving a balance of 2,607,097 loads The cost of washing was 1, 1·74d. per load.

Bultfontein Mine.

The output of blue ground was 60,997 loads, as follows: 720 ft. level, 6,020 loads; 760 ft. level, 10,078 loads; 800 ft. level, 13,627 loads; 840 ft. level, 18,245 loads; 880 ft. level, 13,027 loads. 2,393 loads of reef or waste ground were also hoisted. Hoisting was done from the 1,000 ft. level. We have in sight above the 1,000 ft. level 10,182,000 loads. It is estimated that between the 1,000 ft. level and the 1,600 ft. level there are 22,000,000 loads. The average quantity of water pumped from the mine was 21,600 gallons per hour. No development work was done during the year. The depth of No. 1 main rock shaft is 708 ft. The depth of No. 2 main rock shaft is 1,715 ft. The stock of blue ground at the end of last year was 3,138,321 loads; 60,997 loads were deposited, and 864,052 loads were washed—of which 6,203 loads were returned to stock as lumps—leaving a balance of 2,335,266 loads. The stock of cylinder lumps at the end of last year was 37,742 loads, 6,203 loads were deposited, making a balance of 43,945 loads. The cost of washing was 1s. 3·88d per load.

Dutoitspan Mine.

No hoisting was done during the year. 15,259 loads of reef or waste ground were hoisted. We have in sight above the 750 ft. level 13,245,000 loads. It is estimated that between the 750 ft. level and the 1,300 ft. level there are 25,000,000 loads. The average quantity of water pumped from the mine was 6,846 gallons per hour. The following development work was done during the year:—Tunnels driven in rock, 931 ft.; passes sunk in rock, 44 ft. The depth of No. 1 main rock shaft is 1,424 ft. The depth of No. 2 main rock shaft is 768 ft. The stock of blue ground at the end of last year was 4,341,900 loads; 108,597 loads were washed, leaving a balance of 4,233,303 loads. No cylinder lumps were deposited or treated during the year, and the stock remains at 360,969 loads.

STOCKS—LOADS.

	30/6/16.	30/6/15.	30/6/16.	30/6/15.	30/6/16	30/6/15.
	BLUE.		LUMPS.		TOTAL.	
De Beers	48,396	48,396	—	—	48,396	48,396
Kimberley	—	—	—	—	—	—
Wesselton	2,607,097	3,448 845	—	—	2,607,097	3,448.845
Bultfontein ..	2,335.266	3.138,321	43,945	37,742	2.379,211	3.176.063
Dutoitspan ..	4,233,303	4,341,900	360,969	360,969	4,594.272	4,702,869
Totals .	9,224,062	10,977,462	404,914	398,711	9,628,976	11.376,173

Reef and Blue Mixed.

Kimberley Mine: June 30, 1916, 571,176; June 30, 1915, 571,176. The average yield per load of blue ground washed was as follows:—Wesselton Mine: Present year, ·26 ct.; previous year, ·26 ct. Bultfontein Mine: Present year, ·40 ct.; previous year, ·35 ct. Dutoitspan Mine: ·19 ct.; previous year, ·20 ct. The tramway system has been well patronised by the general public. In addition to the company's employees, who travel free of charge, and school children and shop assistants, who are conveyed at reduced fares, 2,213,301 passengers were carried during the year, as against 1,889,509 for the previous year. The current supplied to the Kimberley City Council for the year under review amounted to 792,584 units, as against 856,196 for the previous year. The rainfall for the year, registered at Kenilworth, was 11·56 inches, as compared with 17·10 inches for the previous year. The rainfall for the last seven years was as follows:—Year ending 30th June, 1910, 13·69 inches; 1911, 13·85 inches; 1912, 16·83 inches; 1913, 14·19 inches; 1914, 10·82 inches; 1915, 17·10 inches; 1916, 11·56 inches. The depth of the water in Du Toit's Pan on the 30th June, 1916, was approximately 12·25 feet, equal to 410,188,000 gallons, as compared with approximately 10·7 feet, and 334,562,500 gallons on the 30th June, 1915. All

our boiler plants were supplied with water from the purifying plant at Wesselton Mine. The number of white employees at 1st July, 1915, was 726 men and 12 lads; and at 30th June, 1916, 1,306 men and 97 lads, exclusive of 526 white employees on active service. The number of natives employed at 1st July, 1915, was 1,219; and at 30th June, 1916, 6,656.

THE WAR.

In continuance of the policy pursued during the previous year, work of some kind was found for employees who, by reason of age or infirmity, were unable to proceed on active service, and also for those who were discharged from the military forces as medically unfit. Many old hands were employed on the construction of dams and work of a temporary nature—which, though not necessary, was nevertheless useful. The rate of pay allowed was half normal rate, with a minimum of 7s. 6d. per diem. Full pay rates came into force on the 1st January for all employees engaged on productive work, including workshops, but a proportion of daily-paid employees engaged on unproductive work and all salaried officials were paid three-quarter rates. As from 1st July, 1916, all employees have been in receipt of full pay. The company continues to allow to its employees with the Union forces the difference between their company half pay and their military pay, the married men retaining their separation allowance, which is not deemed to be "pay," whilst employees with the forces overseas are allowed half their company pay in addition to their military pay and allowances. The expenditure to 30th June, 1916, has been as follows:—Union Military Forces: Year ended 30th June, 1916, £50,534 4s. 2d.; year ended 30th June, 1915, £67,851 10s. 3d. Overseas Forces: Year ended 30th June, 1916, £18,805 19s. 9d.; year ended 30th June, 1915, nil. Total: Year ended 30th June, 1916, £69,340 3s. 11d.; year ended 30th June, 1915, £67,854 10s. 3d.

ANSWERS TO CORRESPONDENTS.

All inquiries addressed to the Editor must bear the writer's name and full address. We cannot reply to inquiries by letter, but telegrams with replies prepaid will be answered. Correspondents are requested to write their names and pseudonyms distinctly.

"Crusher."—Early in 1917.

"East London."—(a) Quite satisfactory. (b) Quite. (c) A good investment with excellent dividend prospects. (d) Up to the average.

"C. H. H." (Pilgrims' Rest).—(1) Cannot trace the syndicate. Nothing to do with recent venture. (2) (a) Because milling suspended. (b) Speculative. (3) Should prove a remunerative lock-up.

"Shareholder."—Recent development is, if anything, better than the average to date.

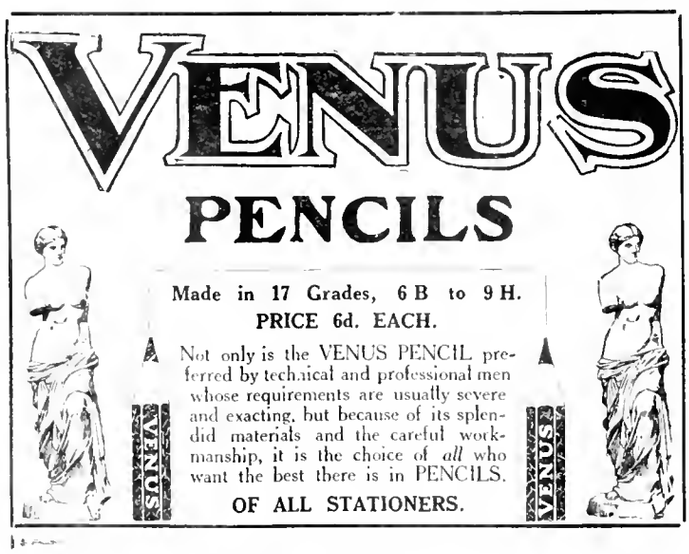
"E.M."—The particulars will be found in this issue.

The Metric System and Daylight Saving.

The South African Institute of Engineers had been asked by the South African Association for the Advancement of Science, Witwatersrand Centre, to appoint a representative and alternate to act on a joint committee of technical societies to be formed to discuss the question of the introduction of the metric system, decimal coinage and daylight saving. The Council had appointed a representative, subject to the condition that the Institution would not be bound by any decision arrived at without confirmation by the Institution, and that in the event of other matters being raised calling for joint action these should be first referred to the Council through its representative.

Pegging Case Appeal Fails.

In the East Rand pegging case, Russell and others v. the Mining Commissioner of Boksburg, in which the respondent was asked to grant a licence to peg claims on the farm Geduld, or, alternatively, to allow appellant to prospect and mine, the Appeal Court this week, in considered judgments, held that the Mining Commissioner had no competence to issue the licences asked for or to allow appellants to prospect and mine. The appeal was, therefore, dismissed with costs.



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NOVEMBER GOLD OUTPUT: GROUP RETURNS.

Rand Mines Group.

The following are the results of crushing operations of Central Mining companies for the month of November:—

Company	No. of Stamps Running.	Tube Mills.	Tons crushed.	Estimated Working Costs per Ton.	Total Fine Ozs.	Total Estimated Profit.
Modder B. ...	A96	6	45,000	18/11·9	24,595	£59,547
New Modder ...	180	7	53,300	18/ 6·1	27,954	66,924
City Deep	B154	9	60,000	21/ 1·9	28,496	55,000
Village Deep ...	180	7	52,600	21/ 3·4	17,861	18,299
Village Main R.	160	4	28,500	18/ 8·9	10,117	15,364
Robinson	245	6	55,500	11/ 4·2	16,353	28,111
Bantjes	90	3	23,800	21/ 10·6	6,159	*754
Tls. & averages	1105	42	318,700	19/ 1·0	131,535	£242,491

AIncludes 16 Nissen stamps. BIncludes 4 Nissen stamps. * Loss.

The following are the results of crushing operations of subsidiary companies for the month of November:—

Company.	No. of Stamps Running.	Tube Mills.	Tons crushed.	Estimated Working Costs per Ton	Total Fine Ozs.	Total Estimated Profit.
Rose Deep ...	300	7	66,300	16/ 2·9	16,201	£13,520
Geldenhuis Dp..	300	7	59,800	19/ 10·4	17,546	13,573
Nourse Mines ..	180	5	42,600	22/ 5·7	11,061	10,602
Ferreira Deep ..	280	7	53,760	20/ 1·3	23,046	41,769
Crown Mines ...	660	26	196,000	18/ 0·3	60,758	76,056
Durban Rd. Dp.	100	3	25,000	24/ 7·5	8,197	3,301
Tls. & averages	1820	55	443,460	19/ 0·7	139,809	£158,821

Albu Group.

The following information is officially supplied regarding the November operations of the producing companies of the Albu group:—

Company.	Stamps.	Tons Crushed.	Total Cost.
Aurora West	80	14,600	£13,771
Meyer and Charlton	75	14,600	13,776
New Goch	120	29,940	19,186
Roodepoort United	80	35,766	32,046
Van Ryn Estate	140	38,050	29,184
West Rand Consolidated...	100	34,250	34,898
	595	167,206	£142,861

Company.	Cost per Ton.	Total Revenue.	Profit.
Aurora West	18/10·1	£18,152	£4,381
Meyer and Charlton... ...	18/10·5	41,704	27,928
New Goch	12/ 9·8	27,218	8,032
Roodepoort United	17/11·0	35,224	3,178
Van Ryn Estate	15/ 4·1	47,217	18,033
West Rand Consolidated..	20/ 4·5	41,474	6,576
		£210,989	£68,128

Meyer and Charlton.—The enrichment of stopes experienced in October continued last month.

Goerz Group.

Results of operations on the producing mines of this group for the month of November:—

Company	Stamps.	Tons Crushed.	Total Revenue.	Revenue per ton.
Geduld Proprietary	60	28,500	£42,836	30/ 3
May Consolidated	100	14,020	10,194	14/ 6
Modder Deep Levels... ...	70	40,300	77,536	38/ 6
Princess Estate	60	22,000	27,957	25/ 5
Totals	290	104,620	£158,523	—

Company.	Costs. Total.	Costs. Per Ton.	Profit. Total.	Profit. Per Ton
Geduld Proprietary ...	£29,951	21/ 2	£12,885	9/1
May Consolidated ...	9,408	13/ 5	786	1/1
Modder Deep Levels ...	33,205	16/ 6	44,331	22/0
Princess Estate	27,065	24/ 7	892	0/10
Totals	£99,629	—	£58,891	—

Consolidated Gold Fields Group.

The following are particulars in regard to the outputs and profits for the month of November of the undermentioned companies of the Consolidated Gold Fields group:—

Company.	No. of Stamps.	Tube Mills.	Tons Crushed.	Gold declared, Fine Ozs.	Total Profit.
Simmer and Jack ...	320	7	67,300	16,255	£20,241
Robinson Deep ...	160	9	54,600	18,632	25,198
Knights Deep	100	11	105,600	19,680	15,252
Simmer Deep	220	10	60,900	13,727	5,920
Jupiter	80	5	23,100	6,159	3,692
Sub Nigel	30	2	9,240	1,877	5,831
Totals	1210	44	320,740	79,330	£76,134

Reserve Gold.—Simmer and Jack, 450 ozs.; Robinson Deep, 1,000 ozs.; Knights Deep, 300 ozs.; Simmer Deep, 1,085 ozs.; Jupiter, 715 ozs.; Sub Nigel, 2,213 ozs.; total, 5,763 ozs.

The sundry revenue included in the above total declared profit is as under: Simmer and Jack, £1,500; Robinson Deep, £350; Knights Deep, £76; Simmer Deep, £104; Jupiter, £691; Sub Nigel, £191; total, £3,212.

East Rand Proprietary Mines.

The following are details of operations on the E.R.P.M. for November:—Eight hundred and twenty stamps milled 148,800 tons, 43,858 ozs. fine gold recovered, valued at £182,271. The profit for the month was £35,029. Decrease in tonnage is mainly due to the accident at Angelo East Secondary Shaft. A large influx of water was met with in the crossent on the 27th level on the night of the 25th of November, which is being satisfactorily handled. Approximately 1½ million gallons are at present being raised daily.

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Neumann Group.

The following are particulars of the results achieved by the crushing companies of this group during last month:—

	TONS.	YIELD.	PROFIT.
Witwatersrand Deep	39,900	£46,209	£10,074
Wolhuter	35,150	43,319	13,051
Consolidated Main Reef ...	27,760	40,592	14,053
Main Reef West	24,340	27,493	1,430
Knight Central	25,500	26,267	220
Total for group		£183,880	£38,828

Barnato Group.

The results of operations of the Barnato group for November are as follows:—

Mine.	Stamps.	Tons Crushed.	Revenue from Gold
Consolidated Langlaagte ...	100	52,600	£63,657
Ginsberg	75	15,350	14,757
Glencairn Main Reef ...	160	20,320	13,358
Government Areas	150	84,000	116,686
New Primrose	140	21,000	16,518
New Unified	60	11,000	13,702
Van Ryn Deep	80	45,000	92,001
Witwatersrand	215	41,450	53,570
November totals ...	980	293,720	£384,249
October totals	960	292,580	£372,170

Mine.	Total Working Costs.	Working Costs per Ton Milled.	Gross Profit including Sundry Revenue.
Consolidated Langlaagte ...	£41,532	15·792	£22,527
Ginsberg	13,423	17·189	1,507
Glencairn Main Reef ...	12,489	12·292	1,019
Government Areas	82,940	19·741	34,249
New Primrose	13,668	13·017	3,006
New Unified	9,673	13·818	1,172
Van Ryn Deep	40,999	18·222	52,553
Witwatersrand	33,540	16·169	22,001
November totals ...	£248,204	16·900	£141,034
October totals ...	£243,770	16·663	£132,684

Monthly Gross Profits.—January, £123,882; February, £122,713; March, £126,172; April, £125,802; May, £129,958; June, £128,193; July, £128,435; August, £130,322; September, £131,151; October, £132,684; November, £141,034.

Transvaal G.M. Estates.

The following are the particulars of this company's output for the month of November, 1916:—Central Mines: Tons crushed, 12,700, yielding 6,676·6 fine ozs. Elandsdrift Mine: Tons crushed, 1,365, yielding 883·6 fine ozs. Vaalhoek Mine: Tons crushed, 1,860, yielding 613·4 fine ozs. Estimated value of month's output, £34,014; estimated profit for the month, £11,607.

Brakpan Mines.

The following information is officially supplied in regard to the November, 1916, output:—Stamps working, 140; running time, 24 days; ore crushed, 57,300 tons; tube mills working, 10; ore hoisted, 66,461 tons: ore from dump, nil; waste sorted, 13·48 per cent.; fine gold declared, 21,835·61 ozs.: value declared, £91,913, equal to 32s. 0·97d. per ton milled; working costs, £55,293, equal to 19s. 3·59d. per ton milled: working profit, £36,620, equal to 12s. 9·38d. per ton milled.

New Kleinfontein.

New Kleinfontein Company, Ltd.—Stamps, 250; days, 28·369; tube mills, 7; tons milled, 72,380; gold recovered—fine ozs., 21,017·233; net value, £87,221 10s. 4d.; profit, £20,606 18s. 2d.; working costs (excluding development), 16s. 7·88d.; development to working costs, 1s. 9d.; total working costs, 18s. 4·883d.; capital expenditure, £1,553 14s.

Glynn's Lydenburg.

The following are the particulars of this company's output for the month of November, 1916:—Tons crushed, 1,208, yielding 2,000·4 fine ozs.; estimated value of month's output, £8,385; estimated profit for the month, £3,530.

Luipaardsvlei Estate.

During the month of November, 1916, this company crushed 21,720 tons, the total profit won being £3,474.

The Sheba G.M. Co.

The following are particulars of the working of the Sheba mine for the month of November:—Tons crushed, 6,862 tons; fine gold yielded, 1,966 ozs.; working expenses, £6,990; development, £1,600; estimated loss, £696.

PERSONAL.

His many friends will be glad to learn that Mr. W. Moses, Inspector of Mines for the Boksburg district, has entirely recovered from his recent accident and is now able to attend to his duties.

* * * *

Mr. George Bessat, a French engineer, is on a tour of enquiry in South Africa in the interests of his country. Mr. Bessat is studying local conditions with a view to the extension of French industrial enterprise in South Africa, and he says that he has met with much encouragement at all the places he has visited. Speaking of his own country and the war, he said that the whole French nation was solidly united in prosecuting the war, and that there could now be no doubt at all about the final victory of the Allies.

* * * *

The following is the list of certificates issued by the Mines Department for the month ending 30th November, 1916:—Mine Overseers' Certificates: Metalliferous mines—T. Hall, J. F. Bihl, W. S. Sleep, E. L. Gay-Roberts, J. Grubb, P. Penaluna, V. D. Smith; Diamond mining only—A. Kirk. Mine Surveyors' Certificates: R. Joehelson (honours), P. Friedman, J. J. Casein. Mechanical Engineers' Certificates: Mines—J. Balfour, E. T. Oates, W. Daly, T. E. C. Stanton, L. Kummer, H. Wragg; Works—R. Leslie. Electrical Engineers' Certificates: Mines—G. M. Stirling, H. Wragg.

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THE WEEK IN THE MINING MATERIAL AND ENGINEERING TRADES.

The London Crisis Stiffening Trade in Johannesburg—The Timber Problem— Extraordinary Freight Rates—The Far Eastern Rand—Johannesburg Status.

The crisis at Westminster has had a peculiar effect on the Commercial Exchange, where business is more active, as contractors more particularly, are covering their forward commitments for the work already in hand. In a measure, also, the mines are quietly building up their reserve stores again. There is no rush, but one can feel the tendency of a persistent demand, which was not anticipated until the turn of the year. The fact is that merchants are beginning to realise the fact that a hurrying up of the war machine means the requirement of more ships by the British Government, therefore less ships will be available for mercantile purposes. Even now there is a good deal of the shrugging of shoulders and flippant arguments that Johannesburg will not suffer much, because we have escaped everything in the past. Nevertheless, whatever happens those merchants who have stocks on hand and in transit are on the right side, whilst the merchants who have been trading from hand to mouth as regards their commitments will have to stand aside for those who have been more venturesome in obtaining stocks and diagnosing the position well ahead. In any case the merchants with an established business are in for an anxious time, as they must keep on trading to hold their trade together, as the war must end some day. In the meantime there are heavy monthly charges to meet, and people have to provide their household and private expenses out of something or another.

The Timber Position.

Examination of the timber problem will assist in further illuminating the general position as referred to in the previous paragraph. Undoubtedly Baltic timber, which is our mainstay both for the mines and building operations, must get dearer, as we are just beginning to feel the absorption of the supplies purchased a long while ago at much lower rates than those now prevailing. Roughly speaking, what has happened is that when a solitary cargo arrived from oversea the importer reckoned the cost and averaged same over the whole of his stock on hand. This procedure was partly on account of the competition and partly because the builders bitterly complained of the extra costs not only affecting them seriously on the then present contracts, but had the tendency to hang up contracts because of the ever-mounting up of prices generally. A Baltic timber steamer, whose cargo is destined for Johannesburg, was signalled off the Cape on Wednesday last. This is supposed to be the only steamer from the Baltic timber fields around our coast at the present time. The freight by this steamer cost over £20 per standard, and to-day the recognised rate is from £20 to £25 per standard as compared with from 65s. to 100s. in pre-war days. This enormous difference, it is said, means that a sailing ship, negotiating its passage safely, covers its own worth in one voyage to South Africa. Taking the case of Oregon timber, the position is somewhat stationary, practically on account of the freight difficulty. The price of this timber in Johannesburg is now from 5s. 9d. to 6s., whereas under the increased cost of the wood at the port of shipment, with the additional freight charges, it cannot be sold under 8s., therefore the importers are chary about committing themselves. These difficulties in handling oversea timbers have had a beneficial effect on South Africa, as the mines are now using a bigger proportion than ever of Cape pine and yellow woods, and it is estimated since the war that South African timber has replaced quite half the Baltic and Oregon kinds for the underground works, as compared with pre-war times.

The Far Eastern Rand.

After the first flush over the tenderings for the new Government mining grounds, there is a little disappointment that the areas are to be tacked, according to the latest ideas, on to existing mines, therefore after all our glowing anticipations, we are not likely to have any brand new mines. Of course, it means, in any case, that much new mining material will be required also as regards the Rand itself it foreshadows an earlier output of gold, as some of the present shafts will be utilised in the early development. As regards the status of Johannesburg, the question often arises as to our future, especially when any of our firms launch a branch establishment out East. For example, it is reported that a new foundry is to be established at Brakpan, hence the status question again arises. A representative mining material man, whose headquarters are in Johannesburg, but often travels the Reef, expressed the opinion that if the worst happens, it would only mean the establishment of branch stores, connected with the Johannesburg house by telephone for the heavier lines. He added also that the means of communication is so complete with the motor cars and telephones that Johannesburg need not fear any real opposition as the great distributing centre of South Africa.

Foundries and Engineering Shops and Coal.

The reports coming forward are that all the Johannesburg engineering shops and foundries are working at full pressure principally on account of the orders from the mines. Hence as a rule there is quite a lot of overtime worked, as some of the breakages coming in are urgent, so that the mines concerned can be kept running at full blast. The orders, previously referred to in these notes, for duplicating the machinery and structural works of collieries, have begun to be placed, as a Transvaal colliery has accepted a Johannesburg tender and everything is fixed for the work to go on as quickly as possible. The idea is to secure the export coal trade, as well as supplying shipping at the coast, as the demand for coal is going up by leaps and bounds, even being affected by the recent Australian coal strike. Although to-day gold mining is the paramount industry yet the coal fields are an excellent second and will run the premier industry closer and closer as times progress.

Corrugated and Galvanised Iron.

There has been quite a flutter in galvanised iron during the week, as stocks have been absorbed to such an extent that Johannesburg is practically a bare market. The demand is so continuous that unless new supplies come for-

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ward pretty regularly, the position will become acute, as even decent stocks soon become exhausted. The British embargo is now being felt, and American supplies are very erratic in the deliveries in South Africa. The fact is that we have so very few substitutes for galvanised iron for roofing purposes on the Rand. One occasionally sees a roofing of tiles, and attempts are made to utilise slates, but both require a more expensive timber roof to carry the extra weight, and there is the heavy extra labour charge, as compared with the useful galvanised iron. In this respect there should be an opening for an industry to produce a light roof covering in place of galvanised iron. To say the least, it would be a relief to the eyes to view something else besides galvanised iron, although the painter has much to be thanked for, in making it fit in and harmonize with the buildings. Inventors in this respect can remember that we have no seasons of snow to contend against, because when the snow melts the best of roofs are severely tested.

Steel and Iron.

As predicted, the diamond mines have come into our market and placed important orders for high-class steels generally, as well as iron bars and structural ironwork. It is not a question, at the moment, as to price, as material must be secured to open up the mines again. High speed steels are very scarce indeed; in fact, it is not easy to get steel from Britain, as the Government has to give permits, and then the question of freight is another stumbling block. The mine buyers are again keen in filling up their reserves, hence a fair amount of activity in particular lines. Undoubtedly the value of iron and steel must ascend considerably owing to the strenuousness of war conditions.

Second-hand Material.

There is a little activity in securing shaftings, train rails, and plates. Fortunately there have been several derelict mine properties come into the market recently, which has enabled the dealers to replenish with mining materials their badly-depleted yards. Rhodesia is making enquiries for some sorting-up lines which cannot be obtained at Bulawayo or Salisbury, otherwise business with Rhodesia has slackened off of late. There have been enquiries from the Natal fields for coal cutting machines, but so far no deal has resulted. As regards building materials the farmers are too busy ploughing and cultivating to attend to anything outside that, hence the second-hand yards for timber and galvanised iron have been neglected.

Revised Price List.

Approximate war prices, subject to quick change.—Mining and building hardware: Iron, imported, round up to 1 in., 30s.; 2 in. to 6 in., 25s. per 100 lbs. Ditto, square, up to 1 in., 27s. 6d.; 1⅛ in. to 2¼in., 23s. 6d.; 2½in. to 5in., 25s. Flats, 3-16in., 37s. 6d.; all from ¼ in. up, 30s. Angles, ⅜ in. to 3-16 in., 40s.; ¼ in., 35s.; 5-16 in. to ¾ in., 30s., excepting 5 x 4 x ⅝ in.; mild steel bar, 4½d. lb.; drill, 7 lb.; steel plates, 10ft. by 4ft. by 1-16th in., 35s.; ⅛in., by 3-16in., 32s. 6d.; ¼in. to 5-16th in., 31s.; ⅜in., up to 30s.; 10ft. by 5ft. by 1-16in., 36s. 6d.; ⅛in. and 3-16in. 34s.; ¼in. to 5-16in., 32s. 6d.; ⅜in., up to 31s. 6d.; intermediate sizes up to 12ft. by 6ft. by 1-16in., 37s.; ⅛in. and 3-16in., 34s. 6d.; ¼in. and 5-16in., 33s.; ⅜in. and up 32s., all at per 100lb.; hexagon and cuphead bolts, ½in. diameter to 2½in., 55s., over 2½in., 52s. 6d., ⅝in. to 2½in., 50s., over 47s. 6d., ¾in., ⅞in., 1in., up to 2½in., 45s., over, 42s. 6d.; nuts, ⅜in., 10d. lb., ½in., 60s., ⅝in., 57s. 6d., 1⅜in., 1⅝in., 62s. 6d., 2in., up, 67s. 6d.; washers, all sizes, 45s.; rivets, 3-16in., 1s. 1d. lb., ¼in., 5-16in., 10½d., 7-16in., ⅜in., 7½d., ½in., 45s., ⅝in., 42s. 6d., ¾in. up, 40s. lb.; shoes and dies, 32s. 6d. to 35s. per 100lb.; rails, £23 per ton; picks, 4lbs., 27s. per doz.; shovels, 32s. 6d. to 50s. per dozen; drill hammers, 5½d. lb. to 6d. lb.; rock drill handles (best American), 14 in., 3s. 6d., 24 in., 7s., 30 in., 9s. 6d., 36 in., 13s., per dozen; metal, antimonial, 1s. per lb.; galvanised iron, 24 gauge, 6 ft. to 10 ft., 10½d., 11 ft. 11d., 12 ft. 1s.; 26 gauge, 6 ft. to 8 ft., 8¾d.; 9 ft. and 10 ft., 9d.; flat galvanised, 18 to 24 gauge, 35s. to 39s.; 26 gauge, 36s. 6d. 100 lbs.; floor brads, 36s.; ceiling, 40s.; wire nails, 37s. 6d. to 55s. per 100 lbs.; solder, 50 per cent., 1s. 3d. per lb.; locks, rim, 48s.; mortice, 60s. dozen; barbed wire, 25s. to 29s. 100 lb. coil.

Timber: Deals, Baltic, 9 x 3, short and medium, 1s. 1d.; longer lengths, 1s. 2d. to 1s. 3d. (Oregon, 1s. 1½d.); flooring, 4½ x ⅞ and 6 x ⅞, 6½d. to 6¾d. per sq. ft.; do., 4½ x 1⅛, 9d.; and 6 x 1⅛, 9d.; ceilings, 6 x ½, 3½d. to 3¾d. per sq. ft.; Oregon, 4 x ½, 4½d.; pitch pine, 8s. per cub. ft.; Oregon, 5s. 9d. to 6s. per cub. ft.; clear pine, ½ in. x 12 in., 7½d. per ft.; 1 in. x 12 in., 8½d.; teak, small planks, 14s. 9d. per cub. ft.; do., large, 15s. 6d.; jarrah, 9s. 6d. per cub. ft.; poplar, 1 in. x 12 in., 10d.; scantling, 1s. 1d. to 1s. 2d. per ft., 3 x 9.

Bricks, cement, lime, etc.: Cement, nominal, 34s. 6d. per cask; Pretoria Portland, 9s. 3d. per bag; 8s. 3d., truck loads; lime, white, 7s. 9d.; truck loads, 6s. 9d.; slaked, do., 5s.; blue, 3s. 3d.; plaster lime, 4s.; bricks, stock, delivered, 37s. 6d. to 42s. 6d.; wire cuts, 50s. to 70s. pressed, 70s. per 1,000, road transport difficult to obtain; salt and white glazed bricks, £27 10s. per 1,000; tiles, roofing, £17½ square; glazed tiles, 10s. 6d. to 17s. 6d. yard; paving cement tiles, 8s. 6d. yard laid; terra cotta tiles, £15 per 1,000; reinforced concrete columns, 6 ft. plain, 22s. 6d., fluted, 24s.; fireclay bricks, £9½, good average, per 1,000; clay chimney pots, 80s. per doz.; fire clay, 37s. 6d. ton on rail.

Oils, paints, lead, oxides, glass: Linseed, raw 28s. 6d.; boiled, 28s. 6d. per 5 gallons; white lead, 70s. to 72s. 6d. 100 lbs.; turpentine, 49s. 2/4 galls.; 10 l., 54s.; coal tar, imported, 10s. to 12s. 6d. per 5 galls.; oxide in oil, 35s. to 36s. per 100 lbs. dry oxide, 21s. to 22s. 6d.; S.A. crude oxide, 12s. 6d.; linseed oil putty, 4s. 6d. per 12½lbs.; bladders, 36s. casks of 100lbs.; grease A.F. axle, 23s. 6d. to 25s. per 100 lbs.; tallow, 1s. per lb.; White Rose paraffin, 17s. 3d. 2/5; Laurel do., 17s.; petrol, 27s. 6d. 2/4; motor oil, 6s. to 7s. 9d. per gallon; engine lubricating oils, 22s. to 35s. per case; cylinder, 25s. to 40s.; paints in tins, 10d. to 1s. per lb., according to quantity, and if ordered to be mixed, 20 per cent. on pre-war rates. British plate-glass, ¼in., 3s. 6d.; do., mirror, 4s. 6d.; window, 16oz., 1s. to 1s. 3d. foot.

Chemicals: Mercury, £20 per 75 lb. bottle; bichromate potash, 3s. 6d. lb.; chlorate, 2s. 6d. lb.; permanganate, 7s. 6d. lb.; alum, 4d. lb.; carbolic acid, 6s. 6d. lb.; borax, 87s. 6d. 100 lbs.; cyanide soda, 1s. 5d. lb.; hypo, 9d. lb.; acetate lead, 70s. 100 lbs.; litharge (assay), 70s. (commercial), 55s. 100 lbs.; zinc sheets and blocks, 1s. 6d. lb.; plumbago crucibles, 5d. per number.

Electrical Goods: Lamps, high volts., British, Holland & American, 16s. to 21s. wholesale, and 21s. to 27s. dozen, retail; carbon lamps, 7s. 6d. per dozen; pure rubber flex, 5d. to 6d. per yard; 3/20 coils of wire, 21s.; do., 3/22, 21s.; tubing, 12s. to 13s. 100 ft.; keyholders, 4s. each; round blocks, 3½ in., 3s. 6d. doz.; lamp holder cord grips, 13s. 6d. doz.; switches, 5 amp., 13s. to 14s. doz.; British glass shades, 24s. to 36s. doz.; Bohemian shades finished; porcelain sbackles, 14s. 6d. doz.; do., bobbins, 9s. to 9s. 6d. per 100; cleats, 18s. per 100; P.O. insulators, 18s.; motors, 3 h.p., about £28 to £35, new.

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TWENTY YEARS AGO.

(Extracts from the *S.A. Mining Journal*, December 12, 1896.)

The Steynskraal Gold Mining Company is another of those companies which is waiting for something to turn up. At present it is waiting for £5,000 to be sent from London by the Steynskraal Syndicate. From the chairman's speech we do not gather that a payable reef has yet been struck on the property. It is expected at a depth of something like five or six hundred feet. The financial principle on which the company is going to work strikes one as objectionable. Properties should not be sold to companies until the development or the indications have proved satisfactorily that gold is present in payable quantities, and when they are sold the companies should be careful to provide themselves with enough working capital, and not scrape along in an anyhow hand-to-mouth fashion.

* * * *

The repetition of the rumours regarding the closing down of the Simmer and Jack old mill has brought forth an official contradiction from the secretary, which is to the same effect as the announcements which have lately been made in the *Mining Journal*.

* * * *

It is an axiom with most men on the Rand that the deep levels will pay. That they should pay at once is out of the question, because they are still something of a new discovery, and few of them have got near to the crushing stage. Unfortunately, European shareholders have not the same confidence. Such a speech as Mr. John Hays Hammond's, expressing as it does the opinion of a man of almost world-wide experience, should go far to prove to the hesitating mind that, given cheapness of production, the deep levels represent payable propositions. That speech should be widely and carefully read. It is Mr. Hammond's profession of faith. He stakes his reputation on it; his position as one of the leading mining engineers in the world must stand or fall by it.

* * * *

SALISBURY AND JUBILEE.

The Wemmer Pan, lying comparatively close to the mills of these companies and supplying them with water, having completely dried up, and the water having been used over and over again to the point of impossibility, the joint mill was closed down at the end of last week until the much-needed rain replenishes the supply. The development of the mines will be continued, and the ore reserves accordingly increased, so that perhaps the temporary cessation of milling may later on be compensated, should the labour supply for the mine be diminished and the ore required for the mill not otherwise be available.

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VOGELSTRUIS ESTATE.

The official opening of the reduction plant of the Vogelstruis Estate took place on Wednesday, to which a few privileged guests were invited. The capital of the company is £200,000, and the property consists of 180 claims, which is opened up on three levels, exposing 180,000 tons of ore. When the 3rd level is completely driven—which should be in a few months' time—the number of tons available for stoping should approximate 300,000 tons. Work was first commenced on the property in July, 1894, and the condition of the mine and the completeness of the equipment plant is highly creditable to the skill and economy of the manager, Mr. Skinner, and the consulting engineer, Mr. Goodwin. The mill consists of 80 head Fraser & Chalmers 1,250lb. stamps, driven by a 500 h.p. engine, with the necessary cyanide plant.

* * * *

MEYER AND CHARLTON.

Although the Meyer and Charlton mill only ran 26 days, the returns are up to the general average, and economies effected in the reduction of wages leave a profit of £6,500 for the month's working.

* * * *

GEORGE GOCH.

The erection of the 60-stamp mill is steadily progressing, the ore-bins being now almost completed, and the whole plant should be in working order by April next. It is intended to use concentration on the tailings before cyaniding, and three Frue vanners will take the pulp from each five head of stamps.

* * * *

NIGEL DEEP.

The Nigel Reef has been struck in D shaft at a depth of 868 feet. This shaft is 2,200 feet from the outcrop. The reef looks well, but has not yet been assayed.

* * * *

MOLYNEUX WEST.

In the leading mine of the new ventures in the Klerksdorp district it has been considered advisable to restrict operations to a great extent, and, before incurring what might afterwards be considered unnecessary expenditure, to thoroughly explore the property by means of drilling. For the purpose of prospecting the property, the present policy of the board is being carried out by means of boring on the northern sections, and four drills are now going down to prove the reef, or otherwise, at different points.

* * * *

There is no change in commercial prospects since our last week's report, merchants and brokers alike reporting that there is practically no business. Market quotations remain unchanged, but that does not indicate that goods are passing over to the consumer at the prices quoted against the different lines. Trade generally in mining materials and such goods as are ordinarily consumed by the mines has fallen completely away, and only such small orders are being executed that merchants characterise the class of what little trade they are now doing as no business. Prices for orders of any magnitude are practically at the mercy of buyers, and many lines are being quitted at much less than laid-down cost.

CORRESPONDENCE AND DISCUSSION.

New Kleinfontein Prospects.

To the Editor, *South African Mining Journal*.

Sir,—Several of your readers seem to hold New Kleinfontein shares and to be "scared." In your last issue, "Student" puts the condition from a mining point of view, and even he, I think, is conservative as to the favourable prospects. Ore reserves are in the neighbourhood of 5½ dwts. and sorting would bring this to at least 6½ dwts., so that when the native labour position is satisfactory, a profit of at least 8s. a ton should be made, or over £30,000 a month. At present working costs are high on account of the large amount of development work and war costs; compared to neighbouring mines, the grade is low, but so is the capital against the tonnage crushed. As for "rumours," the latest I have heard are the splendid values of the Van Ryn Deep as they are getting nearer the Benoni; for the last six months the Kleinfontein section averaged 8 dwts. and still has at least an eight years' life and would in that time alone pay well at present prices; when extra development ceases working costs would again be low.—Yours, etc.,

"CONTENTED TO WAIT."

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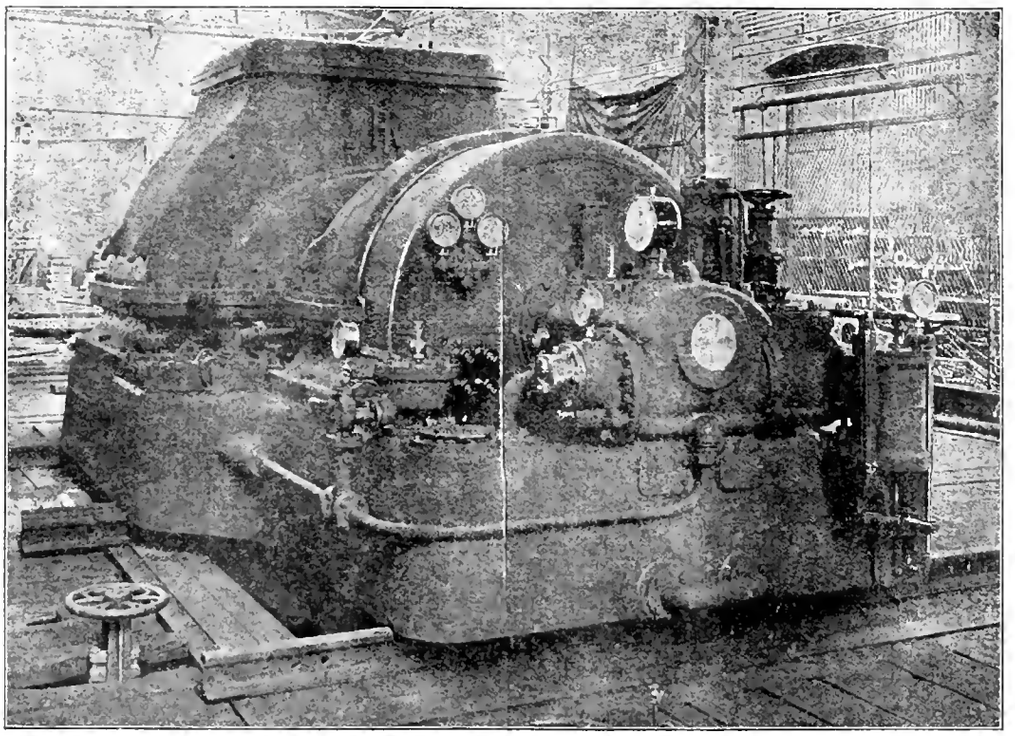

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Engineering Notes and News.

A SIMPLE METHOD OF SIZEING ORE FOR TUBE MILLING—THE DUMB-BELL TUBE MILL.

[By G. A. Robertson.]

If the engineers on the Rand had known before the general adoption of tube mills that this type of machine was capable of crushing battery pulp passing a mesh equal to four holes to the square inch, the tube mill installed on the reduction plants of the Rand would, in all modern plants, have been placed below the stamp mills. The tube mill, however was originally used locally as a means of reducing a fine battery pulp in order to obtain an improved gold extraction in the cyanide works. Consequently, the tube mills installed in order to work in conjunction with an existing pulp elevating system were placed intermediate between the spitzlutten and the tailings elevator. In recently-constructed plants, however, as a rule the tube mills are placed below the stamps, thus minimising the wear and tear on centrifugal pumps which is excessive unless the coarse battery pulp passes through the tube mill before it is elevated for further hydraulic classification. Unfortunately, however, some of these improvements are lost and the saving on wear and tear of pumps is offset by having a second elevating system whereby, practically speaking, all pulp is lifted twice before it reaches the settling tanks. The claims for better classification, etc., by the second lift of pulp is only a fad, as by one lift of pulp after the battery flow has gravitated direct from the stamps to the classifiers and tube mills as many classifiers as fancied can again be used after the pulp is elevated, thus making one tube mill circuit only. In experimenting with the dumb-bell tube mill on the May Consolidated mine, the writer had a unique problem to solve. This was briefly referred to in my previous article on the dumb-bell tube mill.* The writer wished to test this mill on a pulp passing four holes to the inch in the stamp mill, and the manager, Mr. Sartorius, would not allow a coarse pulp from this mesh to flow over the amalgamated plate. The following method gave the best results. A 5 in. "choke" block was placed in the mortar box and upon this the usual screen frame was equipped with a four mesh screen. The height of discharge from the dies is about 12 inches. This gives the desired tonnage for the tube mill. On the discharge lip of the screen frame is fitted a piece of canvas. The lower edge of the canvas rests upon a screen frame 8 inches wide, which is fitted with a 600 mesh screen aperture ·030. Any fine meshing may, of course, be used. This screen, which is renewable without stoppage of the battery, dips at an angle of about 45 deg. The lower side of this screen frame rests upon a V-shaped launder, which is supported across the amalgamated plate and slopes from both ends towards the centre of the amalgamated plate. At the centre of this launder is fitted an outlet pipe which delivers into a portable launder supported over the amalgamated plate. The pulp then issuing from the 4 mesh screen drops on to the fine meshing. The pulp which passes through the fine meshing flows over the amalgamated plate and the coarse pulp, which contains very little moisture, drops into the V-shaped launder. A clear water service is delivered into each end of the launder, and this coarse pulp then flows to the distributing and dewatering box, 12 inches deep. Here the

* See this Journal, 13th November, 1915.

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pulp and moisture are equally divided between the two intakes of the mill. This method of feeding the mill has been proved superior to a single feed and discharge as in ordinary tube mills. It will be seen then that a separation of coarse and fine pulp is made within a depth of 12 inches and such a principle is ideal as a preliminary to subsequent hydraulic classification. Here is a typical grading analysis of the sized feed:—

+ 5 Mesh	32·6%
+12 Mesh	30·4%
+20 Mesh	12·2%
+30 Mesh	8·1%
+60 Mesh	5·4%
+90 Mesh	4·0%
−90 Mesh	7·3%
	100·0%

By the use of a spray across the fine meshing practically all the +90 and −90 grades which failed to pass through the fine meshing could be washed out. One of the drawbacks to development of still coarser crushing in the stamp mills is the excessive erosion of pump liners. Where an extension of a crushing plant was decided upon it would be an economical step to place further installations of tube mills intermediate between the stamps and the tailings pump for the crushing of the coarse ore particles prior to their being elevated for hydraulic classification. What appears to the writer, then, to constitute the ideal flow sheet for future Rand crushing plants is stamps, meshing separator or low fall classifier, tube mills, pumps. After the pulp is elevated it then flows over amalgamated plates en route to the hydraulic classifiers. The overflow from the classifiers gravitates to the settling tanks while the underflow joins the separated coarse feed entering the tube mills. I might here mention that in my previous article I predicted fine results from the dumb-bell tube mill on a feed of 5 tons per 24 hours. Since the erection of this tube mill on concrete foundations I have doubled my estimate and can now show that the dumb-bell tube mill produces a greater tonnage of −90 grade per horse power than a large tube mill. These matters will be dealt with at a future date.

The Future of Siemens.

In the House of Commons recently Mr. Pretyman, Parliamentary Secretary to the Board of Trade, in replying to a question, said that the firm of Siemens was now a controlled establishment doing Government work under a supervisor. It was in the national interest that the firm should be acquired by British firms, who would make the best use of the plant for the development of the electrical industry of the country. Active steps to that end were progressing.

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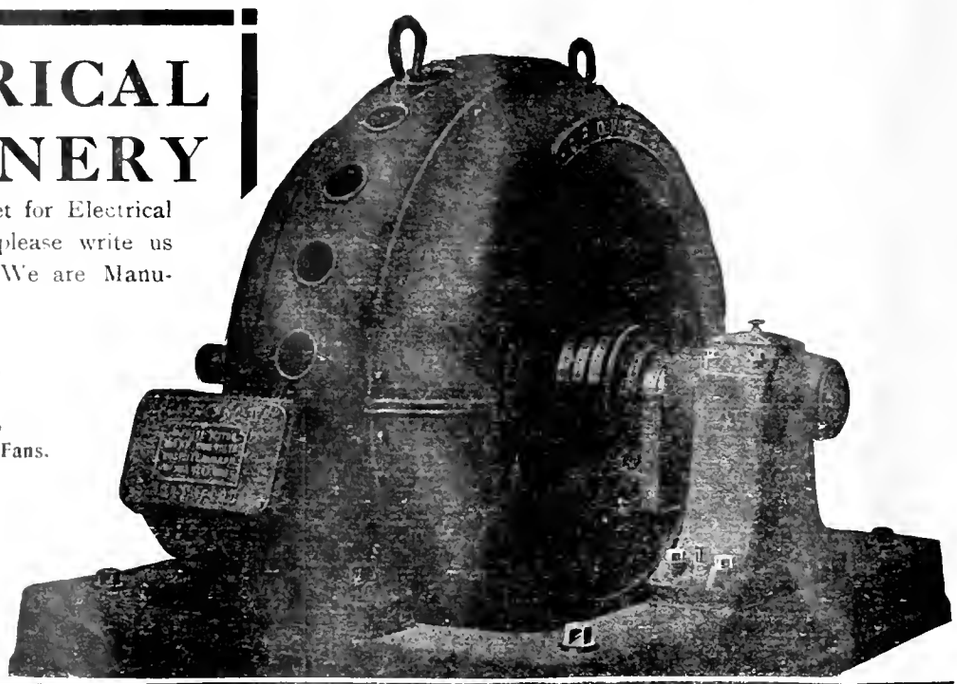

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The Week's Meetings.

DE BEERS CONSOLIDATED MINES.

The twenty-eighth ordinary general meeting of De Beers Consolidated Mines, Ltd., was held in the Board Room at the company's offices in Stockdale Street, Kimberley, on November 30. Mr. Francis Oats presided.

THE CHAIRMAN'S SPEECH.

Mr. Francis Oats, in moving the adoption of the directors' report, balance sheet and profit and loss account for the year ended 30th June, 1916. He said, inter alia:—Gentlemen,—In these strenuous times talking is not a pleasant thing at all, but to-day it is work that is before us. We have passed through another year of this terrible war, and we as a company have had a part to play in carrying on the struggle.

Export Tax on Diamonds.

We fully sympathise with the Government of the Union, and with the Government of the Mother Country in the responsibilities and difficulties by which, at a time like the present, they must necessarily be faced. We recognise that it is not a time for criticism of those who are carrying on the administration of affairs. If we do not criticise the Government here, or the Government at Home at this period, it is not because we individually agree in all cases with everything they may have done, but because we feel that it is no business of ours to meddle, or "talk to the man at the wheel." (Hear, hear.) Upon them rests the responsibility of carrying the war to a successful conclusion, and they are not helped by unfavourable criticism. We feel that under these circumstances criticism must be dispensed with, except for very grave reasons, until the end of the war. We have certainly felt a little bit strongly in regard to the export tax on diamonds, inasmuch as in effect it falls almost exclusively on De Beers Company. We do not for a moment desire to hamper or hinder the Government in procuring the money which they must needs have for carrying on the war, but we would have preferred them to adopt the policy of general fairness, and we do not think this principle is being adhered to when we are taxed 5 per cent. more on our production than our competitors. That is what we feel, although, for the reasons I have stated, we are not remonstrating with the Government, or taking any political action to remedy what we nevertheless hold to be an injustice. We want everyone to realise that we are not indifferent to what we consider to be the unfairness of this taxation as affecting our company. Surely other producers, like those on the Vaal River Diggings, the price of whose diamonds has been maintained and raised considerably, by the policy of De Beers Company—and they are going to be higher still, if Mr. Joel can get his way—could, without any hardship, be asked to contribute a small percentage towards the expenses of the Government on account of the war..

Dividend on Preference Shares.

Having said so much, anything I say further will be qualified by these references to the war. The war being still on, we can make no prophecies or promises. We can only say that, as shown by our balance sheet and profit and loss statement, we are doing what we can and at the same time trying to make some little return for the shareholders who have been so long without any dividend. The preferred shareholders fortunately have received something during the year, and from what we can see there seems no doubt that the accumulated arrears on the preference shares will be paid off by the end of this year. (Applause.) That is something accomplished, and something to maintain the credit of the company, because so long as there was this liability in respect of the preference shares there could not be very much hope of the deferred shareholders receiving a dividend. We are satisfied that at the end of this year we shall pay off all the liabilities on the preference shares. We start, therefore, from the end of this year, free, in so far that any profits made will go to the deferred shareholders, after the liabilities to the preference shareholders have been satisfied.

Turning to the profit and loss account, about which you will perhaps expect me to say something, I do not intend to expatiate on that at any length. The question may be asked as to how the figures come to be what they are. Well, the directors' report explains that very fully, and I will therefore ask our Secretary, Mr. Pickering, to read an extract, which will make the financial position clear.

Financial Position.

Mr. Pickering then read the following: —"The stock of blue ground and lumps on the floors at 30th June, 1916, was 9,628,976 loads. Your directors have much pleasure in announcing that in consequence of some demand for diamonds in the early part of the financial year they were able to renew washing operations at Bultfontein and Wesselton Mines on 1st January, 1916, and at Dutoitspan Mine in April, 1916. The demand gradually increased, and to replenish the blue ground on the floors it was essential to restart mining, and in May and June of this year the Wesselton and Bultfontein Mines were gradually reopened. The profit and loss account shows that the revenue from diamonds amounted to £2,142,091 19s. 3d., though the actual sales of diamonds amounted to £2,652,561 11s. 3d. The difference between these figures represents the depletion of diamond stocks during the year at cost of production. The revenue from all other sources amounted to £155,689 3s. 1d., bringing the total revenue for the year to £2,297,781 2s. 4d.

The mining expenditure amounted to £395,850 5s. 5d.; charges, expenditure on farms and landed property and tramways amounted to £96,082 5s. 8d. Interest on capital of leased companies and interest and sinking fund on debentures totalled £242,882 18s. 10d. Donations to public institutions and relief, compensation and annual leave payments to employees amounted to £49,849 2s. 11d. The mining profits tax and British income tax amounted to £159,135 16s. 3d., whilst the expenditure consequent on the war amounted to £316,660 8s. 2d., which included the cost of maintenance of the mines and floors whilst the mines were closed down, gratuities to employees who resigned, and salaries and wages paid to employees on active service as detailed in the profit and loss account. The total expenditure amounted to £1,260,460 17s. 3d. as against revenue £2,297,781 2s. 4d., the result being that £1,037,320 5s. 1d. was carried to the credit of appropriation account. This result enabled your directors to redeem their obligation to the preference shareholders for the period 1st July, 1914, to 31st December, 1915, by the payment of £1,200,000 in dividends.

The general reserve fund stands at £1,463,982 19s. 5d., and the fund to redeem the De Beers 4½ per cent. Exploration debentures has been increased to £345,706 10s. 4d., the two funds being represented by securities at the market price prevailing at 30th June, 1916. At the close of the period under review, your company held £1,160,000 in English Government Treasury bills, and £869,159 in the 4½ per cent. war loan, and since the close of the financial year your directors subscribed £200,000 to the recent Union Government 5 per cent. issue."

Investments in Government Loans.

Resuming his speech, Mr. Oats said:—I am very much obliged to the Secretary for reading that for your information. It gives you the salient points. The remark may be made: "Oh, yes, you have got a million profit for the year, out of which and other accounts you have paid £1,200,000 of dividend. Well how have you got that? Have you got it fairly, properly, and honestly?" In reply, let me tell you that we have reduced our stock of diamonds on hand, and in regard to that it is fair to say that we have rather an abnormal profit for this year, because they were only taken into account at cost of production in the year before, and now that reduction of stock has been realised, and the difference between cost of production and the selling value comes into the profits of this year. Then, again, the blue ground on the floors stands at a certain amount. That blue ground has been decreased from stock. But what I want to tell you is that the decrease is not taken into account other than this —that the cost of working the blue ground from the floors has been debited to our expenses, and the amount released has gone into our reserves. Our total reserves, including blue ground and money, are exactly the same, and have not altered, and the effect of reducing the blue on the floors has been to put a little over £200,000 to the credit of our reserves, which money has been invested mostly in Government loans for keeping this war going. Now, I don't think we could make a better use of our blue ground on the floors than wash it up, take the cost of putting it there, and supplying the Governments to help them under the existing conditions.

I think these are the salient points. As to the resumption of ordinary working, we started washing in the first instance, as the directors' report shows, at Wesselton and Bultfontein, and soon afterwards we started hauling from those mines, so as to keep up the stock of blue on the floors. Since then we have been washing from Dutoitspan, where we have such a large stock of blue on the floors that it is not necessary to haul at present to keep up the supply. The time will come, of course, when we shall have to do so, but at present it is not necessary, and is not being proceeded with. I hope it will be proceeded with before we meet again.

Leading Producers and Control of Output.

One feature of the present situation on which I must congratulate the shareholders is this. You will remember that just before the war a conference was held at which the admission was made by all the diamond producers that it was necessary to have regard to the market and the quantity of diamonds we

should produce. That resolution was adopted, and out of that I hope much good will come. In times past one man produced as much as he could so as to embarrass another, and compel him, perhaps, to make terms which would be unsatisfactory from his point of view. Happily that spirit has gone altogether, and I think we are very much indebted to the influence of our co-director, Mr. Joel, who is also largely interested in other diamond mines, for the spirit prevailing to-day. (Applause.) Thanks to that spirit we have been able to actually raise the price of diamonds during the past financial year. I think our diamonds to-day—and I am speaking in the presence of Mr. Brink, our valuator—bring higher prices to the company than at any time in the history of the company. (Applause.) I am very glad to be able to congratulate the shareholders upon that and upon the fact that other producers are contribnting towards that result, and I believe they have no regrets for following that course. Is it better to work your mines out faster, and put your diamonds into the market for what you can get, with little or no profit to the shareholders, or to work the mines with a due degree of control and regard for the quantity of output? We know very well that people who purchase our diamonds do not thank us if we produce more diamonds than they require, and in consequence diamonds become a drug on the market. On the contrary, they are in sympathy for the most part with our policy; and we do hope, notwithstanding the war, and notwithstanding, perhaps, the possibility that there may not be so much money in the world available for a luxury like diamonds, that the policy agreed upon will be consistently adhered to. If we can keep up the price—not raise the price suddenly, and drastically, but maintain the price, and gradually improve on it—producers will recognise it is better for a mine to produce a little less, if they can make a better price, thus securing a greater profit on the output, and conserving the life of the mines for an indefinite time to come.

Increased Revenue for Government.

The chief persons interested in this policy besides ourselves are the Union Government, and they, I am sure, will be ready to congratulate us on the success with which we have been able to maintain and increase the price of diamonds, seeing that for them it means there is the probability that they will obtain more revenue from the mines in which they are more interested than we are, and it will leave their two sources of revenue very much improved—the share of profits they get, and the larger value of diamonds exported. These two things together will make the Government's revenue from the diamond industry very much larger than it has ever been before.

I think I need not dwell at further length on this point. I would prefer to bring to your notice what was said by Mr. Joel at the meeting of the Johannesburg Consolidated Investment Company, Ltd., a few days ago, in which he laid stress upon the importance of this policy. As for me, I am in the position—perhaps not a very nice position—of one who can say "I told you so." True, I have been in favour of this policy for years—(hear, hear)—and I have been opposed in quarters from which such opposition ought not to have come, and least of all from Government circles. Government circles have thought more of the momentary influence of keeping a mine working, and finding additional inducement for votes in the locality, than they have of keeping the diamond industry alive and prosperous in this country for hundreds of years to come. Now, I will ask the secretary to read what Mr. Joel said at the meeting referred to, because it is so well and thoughtfully said—much better than I can say it—but the sentiments have my cordial approval, as I believe they have the cordial approal of my colleagues on the Board.

A Reply to Criticisms.

Mr. Oats, again resuming his speech, said:—Those are our sentiments put into words better than we could use. What would have happened if those sentiments had not guided the producers of diamonds during the past two years? The holders of diamonds, including the Syndicate, would have pushed their diamonds on the market, and realised them, at whatever price they could have obtained, and would have made a very much lower price for the diamonds, too low for some mines to pay anything at all, and so low that De Beers would have paid very little, from which depth of depression it would have taken ten years to recover. This control Mr. Joel spoke of has saved all that. I do trust that some of you present, wherever you go, will use your influence to make these facts clear. Some of you remember the agitation which cropped up in Kimberley a little time ago, and was engaged in by men who ought to have known better, in the course of which the impression was given that De Beers directors were callous. I submit that De Beers' directors are no more callous than are the speakers who engaged in that agitation. We have done what we could in difficult circumstances. Mr. Joel knows perfectly well the trouble which took place with regard to our people when we were compelled to close down the mines. We did all we could to ameliorate that unfortunate situation—(applause)—and there was no callousness on our part during that period. Some of us wanted to go even further than others in doing what we could to tide over that difficult time. I think instead of being reproached by anyone we should have received congratulations, as Mr. Joel in his speech claimed, for being able to do what we have done. We have on our Board some old directors, men who have known the position of diamonds and the diamond market for the last 30 or 40 years, and some new ones. One of these latter said to me, "We shall have to take 25 per cent. less for diamonds in the future when we begin to sell." I said in reply, "Not a bit; if we cannot sell diamonds at our price, we must stop selling until the public want them." We have acted on those lines in the past, and so far so good. We are not out of the wood, and therefore we have to go on to the end of the war. Sympathisers with Germany have got to know that we have to see this war out in our favour, cost what it will.

The Manufacture of Dynamite.

I have before me the report of our directors, from which Mr. Pickering has read the most salient points. It will be seen from this that we have several subsidiary activities. I must say it was a god-send for us that when we stopped work we had these little side interests, which helped to keep things going. Our dynamite works have contributed to our funds in some degree, and have assisted us to pay our calls, such as interest on debentures and on leased companies, which have to be met. Now, we have done our part in keeping up the supplies of dynamite consumed in South Africa—and without dynamite our friends in Johannesburg could not work either. I would like to tell you our competitors here and in England are selling dynamite in this country and in Rhodesia now in competition with us at even lower prices. It is part of the game to annihilate competition by trying to kill us. We supply dynamite (50 per cent. nitro glycerine) ex factory, at 28s. per case. The price at which it is sold by our competitors at home is 55s. a case, but when they are competing with us they sell at an even lower price than we do. If that is not dumping I do not know what is, for this company to make all that profit on dynamite in a country where they have a monopoly, and then to undersell us here in this country. I commend that to our advocate of Free Trade, Mr. William Hosken. (Laughter.) They say that is free trade. I only appeal to consumers of dynamite to go into this question and ascertain for themselves who are their friends. "Codlin or Short," in this case. They are selling dynamite in competition with us at a lower price than ourselves to prevent us increasing our business. I ascertained in London that they endeavoured to prevent us from sending our dynamite to Australia, and tried to ensure that their own friends from America would come so as to keep the place warm until they could come back again and keep us out. It is not often one has an opportunity of referring to this, because the shares in our explosives works are held by De Beers and their nominees only, and consequently the annual meeting is more or less a private one, but the acting general manager of the Cape Explosives Works, Mr. Barker, is here to-day, and he has agreed to us using up the surplus money we have accumulated by paying a dividend—the first dividend the works will have paid, and which will come to our benefit in the next financial year. I hope that will go on again. That profit is made not so much by selling dynamite against monopolies when they sell at a price of £1 a case lower than they are selling in England, but it is made partly through side issues. We have been fortunate in shipping, and from that direction money has come in to help us. We have extended our works, and I hope we shall extend them further still. We are making profits other than by making dynamite. We want to make our dynamite so cheap that our customers will be satisfied. We have used a great deal of influence in order to try to get out orders from the mining groups larger. We have contracts for ten years to come, for which they will pay the cost of manufacture, plus certain fixed charges. Whether we sell more or less to the groups does not affect us for those ten years. It is our duty to get the dynamite delivered to them as cheaply as possible against the sort of competition with which we have to deal. We believe we shall get every company with a bit of British spirit to say: "We will support De Beers factory and give them our custom," just as many Australians have done. We named a lower price to the Australians than they had been paying by 10s. or 15s. a case, but our competitors dropped their prices to below ours. Some of our friends there then said: "We are going to stick to De Beers, who will give us our supplies at reasonable prices." That is the spirit we expect from our dynamite customers in this country in our fight against this talk of free trade, of which we hear so much. We have dynamite sold here £1 a case cheaper than a free trade country like England is paying, thanks to the manipulation of monopolies. The revenue we get from the explosives factory has helped to pay our present obligations. They are, you know, interest on debentures and interest on leased companies, amounting roughly to £170,000. These side issues have helped us this year.

It is true there is a little to our credit for the improvement of our coal property in Natal. We have received a little extra income from there, and we have secured for ourselves a regular supply of good coal.

Prospects for the Future.

The future to-day looks better than it has ever been, thanks to the influence of Mr. Joel. The world must know that if they cannot pay our prices for diamonds they will not have them at all. It is no good giving away diamonds at lower prices; everyone is afraid to buy at lower prices because of the fear of what will happen next. The policy of the company is firm. If we can sell at better prices, we shall sell. There is no retrograde movement in our minds. Such a movement would bring disaster. If we can only obtain better prices it does not matter whether we produce less carats; the mines will last longer. We shall be able to make better profits with lower production at enhanced prices than with greater production at lower prices. Now, most of the shareholders present will be glad to hear a few words from Mr. Joel, who is not here every day with us, and I am sure we are lucky in having him here now, and I am glad he has found time to come here and countenance us. It is hard work—push, push, push, without a push behind you. He is going to help push too. He has been a tower of strength to us. We have endeavoured to have a policy and to carry out that policy, and thanks to Mr. Joel's influence it seems almost certain that we shall get success through it. Some people have said the demand for diamonds after the war will be less, but I am not so sure about that. If we cannot sell diamonds it is better to do without selling them rather than sell them at a sacrifice.

I am very sorry to find the gentleman who always seconds the resolution I am proposing—Sir David Harris—is not here. I hoped to the last he would be able to get here to-day, and I am not sure that not being here he is not feeling miserable on that account. The doctor said he must not come hereto-day. I will ask Mr. Joel to be good enough to second this motion, and give us a little of his cheery optimism for the future, which he is so well able to do, must better than I am able to do. I am not exactly an optimist, as he is. I know the cost of the war, and feel it every day. It is not over, and we have to go through with it yet. (Applause.)

MR. S. B. JOEL.

Mr. Joel, who was cordially received, said:—After the very lucid statement laid before you by the Chairman, I know very well you won't expect much from me. At the same time I must tell you that I am put here as an extra turn. (Laughter.) When I came here there was no intention of asking me to do anything, or say anything. Unfortunately, as your Chairman says, Sir David Harris is unwell, and unable to be present; therefore I am put on in his stead. But, gentlemen, I cannot conceive a grater compliment than that the words I used a few days ago at a meeting of the Johannesburg Investment Company should have been repeated by your Chairman here to-day, and supported by your directors. It is a very great compliment indeed, and I take it as such. It is my one ambition, this control of the diamond output, and I am certain the whole of the community is with me, because it is not only the shareholders, but it is the State which is going to benefit, and the whole country, by the idea of control. Control of output, as you know, will give an everlasting life to the diamond industry. Long after the gold mines are extinct, as they will be, because there is a certain fixed price for gold, the diamond mines will be still going, and your children and your children's children will live to see the diamond mines in existence, provided we always work together as we have done in the last few years. The idea came to me some few years ago, and I conferred, I must say, with our Chairman, and he agreed, and saw it through the same glasses that I did, that diamonds could be raised to a price—not over raised; there is no intention of doing that; at the same time why sell one million carats for one million pounds when you can sell 500,000 carats for two million pounds? That is what I feel, as to-day we are all working together. As I saw it, and felt it, there was only one thing for me to do. That was to acquire at great sacrifice, and without any return to myself, an enormous holding, a controlling holding, in the various companies. I am now speaking as the largest individual shareholder in this company; I am the largest holder in Jagersfontein, and likewise in the Premier; they are the three largest companies. Through my having joined the Board of the Premier, I have brought those gentlemen into line with us to know, and to say, that there is only one thnig, and that one thing is reduced production and higher prices. It is the one time when that old saying applies, "The higher the fewer," and really it does apply in this instance, because the higher the price the fewer the diamonds we have to give them. I can assure you we shall give them very few for a lot of money. (Laughter and applause.)

A Strong Financial Position.

That is the policy, the policy of control, and I want you to know that is our intention. To-day we are in a wonderful financial position. I should think a better position we have never been in before, and that is only after a few months of work. When I came down here last year we were all very sad and crestfallen. I came after consulting and conferring in Johannesburg with the directors of the Premier in order to open up work again down here on a small scale. We started, as you know, at the beginning of the year. Within a few months of washing we opened two of our big mines, and the third will perhaps be opened during this year. It did not seem possible then, and I did not think so myself. Your Chairman said I am an optimist and once I was taken as a pessimist. One day they say I am a bear, and another day a bull. It does not matter. (Laughter.) We started operations, and the balance-sheet to-day stands before you, and it must be very satisfactory to you, and very fine reading, showing as it does that by the end of this year we shall have paid, when we have distributed the two dividends we propose to pay next month, an amount of two millions sterling, and that after a year when we did not sell any diamonds at all. It has all been done practically in the last few months. Our report ends in June and the figures are only made up to that period.

A Satisfactory Position.

I forsee that we shall do better than we have ever done before. I am certain that it will come during even the war period. As far as dividends are concerned, as I say, I am one of the long-sufferers, and being the largest shareholder, I am speaking for the smaller ones also; their interests are my interests, and my interests are their interests. I feel certain during the coming year we shall get a very handsome return upon our investments. The balance-sheet shows you that last year we sold over two and a half million pounds worth of diamonds, which I think, under the circumstances, is a very satisfactory position indeed. The State, as I have already said in my previous remarks, will benefit to an enormous extent, because the fewer diamonds we sell and the larger profits we make, the State will get the revenue—they came in front of the shareholders and the debenture-holders—they take it first and we get what is left. I don't think I have anything further to say. I only want you to be with us, and say our policy is the right policy—a policy of control and maintenance of prices, and selling diamonds as higher prices and not in over-abundant quantities. Diamonds are a luxury, and there are women born every day and while women are born diamonds will be worn—you cannot make them unpopular any more than you can women. (Laughter and applause.) I thank you very much indeed; I can assure you it has been a very great pleasure to come down here and meet my old colleagues with whom I have been associated for the past 35 years—the bigger portion of my life. I am delighted to be present, and to have the opportunity and pleasure of seconding the adoption of the balance-sheet and report. (Applause.)

Mr. Oats observed that Mr. Joel could see into the future of the diamond market better than he could. He (Mr. Joel) said things were going to be better still, even though the war went on. He said so, and he (the Chairman) trusted him, and believed it would turn out right. At the same time there was this military expenditure amounting to £20,000,000 a day; though, of course, it was going out of someone's pocket into somebody else's. It was a great pleasure to him that they had a real live director of De Beers largely interested to come there and take part in the meeting and back them up in what they were doing.

The resolution was carried unanimously.

TRANSVAAL AND DELAGOA BAY INVESTMENT CO., LTD.

The annual general meeting of the Transvaal and Delagoa Bay Investment Co., Ltd., was held on November 30th, Mr. S. C. Black presiding.

The chairman said: I have pleasure in submitting the report and statement of accounts for the year ended 31st August, 1916. Having regard to the anxious and abnormal times through which we are unfortunately still passing, these may be considered as quite satisfactory. Reviewing the past year's operations, you will observe that the volume of trade has been fully maintained and compares very favourable indeed with that of the previous year, and that our financial position is also appreciably improved. The realised net profit, after writing off £8,461 7s. 9d. for depreciation, amounts to £44,541 4s 2d.; we brought forward from last year £94,058 16s. 4d.; making the total to credit of profit and loss account £138,600 0s. 6d. We recommend payment of a similar dividend as in the previous year, viz.: 17½ per cent.—3s. 6d. per share, which will absorb £32,375. This leaves £106,225 0s 6d. to be carried forward, an increase of £1,666 4s. 2d. as compared with that of 1915. Cash and equivalent assets amount to £122,167 6s. 4d., and doubtless you will acknowledge that our financial position is a very sound one. Referring to the accounts, you will notice that provision has been made for a sum of £10,000 for an item of special capital expenditure, to which I shall revert later on. On the credit side of the balauce sheet, you will see that we have increased the amount of short dated British Treasury Bills from £37,000 in 1915 to £70,000. Our holdings in debentures and shares stand in the books below their present quotations. Recognising the outlook of things generally, we thought it necessary in the best interests of shareholders, to exercise the utmost prudence by a further strengthening of our financial position.

Increased Output.

Turning now to our important asset, the Transvaal and Delagoa Bay Col

lieries, owned entirely by us, you will observe that there has been an increase in the output which reached a total of 573,837 tons as compared with 555,452 tons in the preceding year. Included therein were 16,612 tons of coal supplied free of all cost to the Imperial and Union of South Africa Governments. The supply of railway trucks was certainly more satisfactory than in 1915, and we have enjoyed reasonably fair working time throughout the year. Hitherto No. 2 mine and plant were capable of producing all the coal we were able to dispose of. Owing to the prolongation of the war, a greater quantity of special coal, for shipping purposes, was suddenly required, and we, therefore, considered the matter of re-opening No. 1 mine. You will perhaps remember that in 1914 the plant of No. 1 mine was completely overhauled and remodelled. Though we realised at the time that its main object was to be prepared in the event of accident or breakdown to No. 2, we also had in view the possibility of any sudden increase in the trade. We, therefore, decided during the current month to utilise No. 1 plant, though we feel, of course, that the increased demand may be only of a temporary nature. I may mention that No. 1 and No. 2 mines and plants are capable of producing a considerably greater quantity of coal than we could find markets for in the past at remunerative prices. Let me express the hope that our future output may be more in accordance with the capabilities of our mines and equipment than has hitherto been the case.

Electric Coal Cutter.

The net capital expenditure incurred amounted to £1,621 9s. 1d. We have again, in the year under review, erected several new cottages at our No. 2 mine, besides making improvements to native quarters. Ample provision for depreciation has been made, including the writing down of the cost of our railway line and sidings.

I have already referred to a sum of £10,000, which amount is set aside as a provision for the installation of electric coal cutters with the auxiliary generating plant. I would here briefly explain that the improvements of late years in mechanical coal cutting appliances, prompted your board last year to examine the various types now in use, in order to instal a plant of the most suitable kind. A trial machine was ordered in December, 1915, and should have been at work months ago; unfortunately the overplus of work in the hands of all machinery manufacturers has delayed its arrival far beyond all reasonable anticipations. We hope, however, to have the trial machine at work shortly, and the main plant before our next general meeting. The past season has been one of exceptional dryness, and no rain fell for fully six months. We can now see the value of our decision early in 1914 to construct a reservoir capable of supplying all our requirements of fresh water; for ever since its completion in December, 1914, it has been full to overflowing, and any anxiety in this respect has been set at rest by the test of the past abnormal season. The Transvaal Coal Owners' Association, of which your colliery is a member, carried on its usual distribution work uninterruptedly, and has dealt with 5,462,409 tons of coal as compared with 5,047,385 tons in the previous 12 months. In this total the trade in bunker and export coal showed an increased of 179,565 tons. As South Africa is selling coal at probably the lowest price in the world today at the pit-head, it may seem surprising that the increase was not far greater, but several adverse factors are accountable for it.

Export Trade

The export trade has suffered in a measure because of the restrictions imposed thereon by the British Government in certain directions; that in itself was of no great consequence, still, one would not describe it as a negligible factor, but the ocean trade at the present time is in effect governed by the availability of ships. Undoubtedly a shrinkage has taken place all over the world in the mercantile marine, and until the termination of the war the trade must necessarily be influenced by the high freightage ruling, and the uncertainty of transport. But here let me remark in passing that both the export and bunker business is contracted for in advance for fixed periods and at very low prices, the object of the Associated Collieries being to expand and foster the trade with a view to the future, and despite the difficulty of obtaining supplies, and the rise in prices of all commodities, the collieries have faithfully carried out their obligations in this respect.

Rise in Railway Rates.

Now let us turn to another aspect of the coal industry. When the weekly revenual returns of the South African Railways are studied, you cannot help noticing that whilst all other traffic of late show appreciable decrease in revenue, the only item of increase is that derived from the carriage of export and bunker coal within the Union. The State Railways, unlike the collieries, are not bound by contract to their customers, either to a fixed rate, or for fixed periods, and they have been able to increase their rates for bunker coal by 6s. per ton of 2,000 lbs. to the ports, thus adding approximately at the rate of an additional million and a half pounds or more per annum to the railway revenue. The collieries—I am now speaking of the Transvaal Collieries only—have so far derived no appreciable benefit in the way of better prices from an increased demand for shipping trade; yet it is due to the efforts of the Transvaal Coal Owners' Association—and to it alone—that a considerable export and bunker trade has been built up from the Transvaal. Whilst we rejoice that the State revenue is thus augmented without any dislocation to the trade during the war, it should be recognised that when we return to the normal condition of things, a high railway rate for bunker coal could not be maintained without serious injury to such trade at the South African ports. The increased railway rate was suddenly brought into operation at but a few days' notice, and no opportunity was afforded the collieries to place their point of view before the Administration. When a significant change is contemplated whereby the prospects or position of any important industry may be affected an invitation to confer with such interests has been the usual course adopted by the Government. It is to be regretted that a similar spirit was not shown towards the collieries, for nothing but good can eventuate by mutually discussing problems with an industry needing every encouragement and assistance for its future expansion, especially in finding markets beyond the borders of the Union of South Africa. For years past the Transvaal Coal-Owners' Association's aim was to encourage and develop the oversea trade, and it would be lamentable if its efforts were to be rendered futile by making the price of South African coal excessive at our very doors. It is but fair to add that the collieries fully appreciate the fact that the export railway rate was left undisturbed, which enabled the Transvaal Coal-Owners' Association to carry out its contracts.

Pre-War Prices.

Throughout this protracted war the associated collieries have supplied consumers without raising the price of coal, and all important industries, both at the coast and inland, have been served at pre-war rates. At a time when in every part of the world the price of coal has been enormously increased, that of the Transvaal has remained practically unchanged; yet every item of stores and food supplies has increased materially out here, and is costing the collieries in many instances as much as 100 to 200 per cent. above those ruling prior to the war. One cannot but feel that neither the public nor the press has sufficiently appreciated the fortunate position of South Africa in this respect; it has simply been taken as "a matter of course." The position of our Delagoa Bay properties and our other landed interests remains unchanged. It is yet too soon to appraise the effect upon Delagoa Bay of the alterations in South African shipping freights which took place a few months ago, but we have every confidence that those who are responsible for the partition of trade between the various rival South African ports will see to it that each will receive its due share, especially when the geographical factor decides the proportion. Reference is made in the directors' report to the contribution of 110,000 tons of coal to the Imperial and Union Governments for the purposes of the German West and East African campaigns by the export collieries of the Transvaal Coal-Owners' Association. Our share of the deliveries was completed in August last, and the total tonnage thus given by us was 16,612 tons. This, and the other smaller cash donations to various local charities, we feel sure, you will cheerfully confirm. At the last annual meeting I referred to the negotiations for the division of certain farms held jointly with the Transvaal Consolidated Land and Exploration Company, Ltd. So far we have not yet arrived at a definite agreement, but I have no doubt the matter will be satisfactorily arranged. I have much pleasure in expressing our appreciation and acknowledgment of the good work of your general manager at the colliery, Mr. Jas. McPhee, M.Sc., M.E., and to his staff, and generally to our officials both at the head office and London, and to our agents at Delagoa Bay. I now beg to move that the directors' report, balance sheet and profit and loss account for the year ended 31st August, 1916, be received and adopted.

Mr. Haviland said he understood that the period of the arrangement regarding the Transvaal Coal-Owners' Association would expire in 15 or 18 months, and asked the chairman whether any steps had been taken toward a continuance of that arrangement.

The Chairman: Not to my knowledge.

The report and accounts were adopted.

Messrs. Wm. Dereham, Julius Berlein, S. C. Black, James Ferguson, and Spencer Fleischer were re-elected directors.

Messrs. E. Danckwerts and Co. were reappointed auditors.

Mr. Goldsbury proposed that the directors' and London committee fees should be increased to £600.

In seconding this resolution, Mr. Haviland expressed appreciation of the efforts of the directors, who, he remarked, deserved the congratulations of the shareholders on the company's satisfactory financial position.

The resolution was adopted.

On behalf of the directors, the Chairman acknowledged the compliment.

NEW AREACHAP COMPANY.

The annual meeting of shareholders of the New Areachap Copper Mines, Ltd., was held in the Board Room, Exploration Buildings, on November 30th, Mr. N. Langkilde presiding. 27,710 shares being represented out of a total of 40,495.

The directors' report for the nine months ended October, 1916 stated that the registered capital of the company was £55,000, divided into 55,000 shares of the nominal value of £1 each, of which 40,495 had been issued and fully paid. The company's property consists of a mineral lease for three years ending 30th September, 1918, with an option to pur-

chase the mineral rights of the farm Areachap, situated in the district of Gordonia, Upington. The property is 22,438 morgen and 29 square roods in extent. During the lease a royalty of 2s. 6d. per ton of copper ore or metal exported from the property is payable to the owner, and for iron pyrites the royalty is 9d. per ton as long as the European war lasts, and 6d. after. The purchase price for the mineral rights of the farm is £25,000 and 1,000 shares in the company. The company was formed for the purpose of mining and turning to account the copper and pyrites deposits known to exist on the property. During the past nine months a considerable amount of development work has been done, and 146 tons of copper ore have been sent to London and Swansea. Over 400 tons of pyrites have been sent to Kynochs, Ltd., Natal, and the Cape Explosives Works, Ltd., Somerset West, for the purpose of being tested. These tests having proved successful, it is hoped that a large and remunerative business with these companies will shortly be established.

The Chairman, in moving the adoption of the report and balance sheet, referred to the past history of the company. Nine or ten years ago, he said, the old company working the property had sent a certain amount of copper to Swansea, but the difficulties and expenses connected with the work had been such that the company had had to close down. But as a result of the building of the Upington railway operations had been restarted. A certain amount of ore had been sent Home, but on account of the tremendously high freight it had been found impossible to continue this, and only 146 tons had been sent. Certain quantities of ore had been sent to the Falcon mines and other mines, and it was estimated that in this manner a fair profit might be made. About 1,600 tons of ore, averaging about 25 per cent., was lying at the mine, out of which a profit of about £9,000 might be made by sending it to the Falcon mines for treatment. Iron pyrites had also been sent to De Beers and Kynochs. The latest report from Kynochs was that there was about three per cent. of copper in this pyrites, which came from a new level recently opened. The promises that they might come across richer deposits were very good indeed. Negotiations were proceeding with Kynochs for the taking of large quantities of pyrites, which it was hoped would result in a definite arrangement. With regard to the finances of the company, the position was that after clearing all debts they had about £1,500 to £1,700 in hand. The expenses of the mine were about £800 per month, but he thought that with careful financing they would be able to go on without raising any fresh capital.

Mr. W. Bleloch, in seconding the adoption of the report and balance sheet, said he knew the mine very well indeed. He detailed the difficulties which the old company had been faced with, difficulties which had been such that only a very rich company could have survived them. The railway to Upington had made the position a great deal easier. He thought the company might have done better if they had used their endeavours towards the realisation of the valuable stocks of copper ore in the mines. If the South African companies, like Modderfontein and Kynochs, made up their minds to use the pyrites produced by the mine, which could produce sulphuric acid at a cheap rate, a rich industry might be developed. He felt that there was enough iron pyrites of the necessary strength of sulphur in the mine to supply South Africa for the next thirty years.

Mr. W. Woodburn, the consulting engineer of the company, supported the views expressed by the chairman and by Mr. Bleloch as to the future of the mine. Pure sulphur had gone up so much in the last few years that it was prohibitive in price, and he thought that the iron pyrites of the Areachap mine would have the effect of bringing about a much better state of affairs, which the explosives companies could take against supplies. The mine was a very large one, but the development round the one shaft and the results obtained were such as to warrant the development of the whole area. A great amount of money was required before a good return was made, but with the price of copper at £150 per ton, the return would naturally be better. He did not think that the price of copper would drop to pre-war prices for a considerable number of years, and therefore naturally the prospects of any copper mining company were very much better.

The balance sheet and directors' report were adopted.

Messrs. S. J. Wilkes and P. F. Windsor were re-elected members of the Board.

Mr. A. Roger was reappointed auditor.

MONTELEO DIAMONDS.

The first annual meeting of shareholders of the Monteleo Diamonds, Ltd., was held in the board-room, Bettelheim Buildings, on Dec. 5, Mr. H. de V. Steytler, presiding. In moving the adoption of the report and balance sheet, the chairman stated that the company was still in the prospecting stage so far as proving the extent of the diamondiferous area was concerned. They had no proclaimed area, and that being so they should be guarded in their statements lest the Government should step in and claim its share of the company's labour at an earlier date than possible. He thought, however, that he was justified in stating that they had a mine of approximately 40 claims if the yellow ground which they had proved by means of shafts existed all over and within the boundaries of the exploratory work. From the present shape he thought the mine to be something after the nature of the Blaauwbosch and Roberts Victor Mines. The yellow ground disclosed so far was excellent in quality and yield. Labour was plentiful and a great advantage in relation to the cost per load treated was the proximit to the main line from Johannesburg to Bloemfontein. The only difficulty to be faced was in connection with the the water supply, which, however, was not unsurmountable. A couple of hundred loads of yellow grounds had been put through the machines last week for testing purposes with really excellent results, two stones of 7¾ and 1½ carats, worth at least £100 having been turned out of the sieve among other stones. Concluding, Mr. Steytler said:—I was very pleased to read the optimistic speeches made by Mr. Oats and Mr. Joel, directors of De Beers Co., as to the price of diamonds. There is no doubt that the policy adopted by the said directors is bound to react in a very great measure to the benefit of the small producers."

The report and balance sheet were adopted.

Mr. A. E. Steytler was re-elected auditor, and the proceedings terminated with a vote of thanks to the chair.

NEW GEDULD DEEPS.

An extraordinary general meeting of the New Geduld Deep, Ltd., was held in the board-room, Stock Exchange Buildings, on December 5th. Mr. E. Mansfield presiding, and 109,000 shares out of a total of 300,000 being represented personally or by proxy. The meeting had been called for the purpose of passing the following resolution:—"That the articles of association of the company be, and they are hereby, altered and amended by adding to Clause 108 the following words: "Notwithstanding anything contained in the foregoing clause or elsewhere in these articles, the directors shall have the power to enter into any contract or contracts which shall be forthwith binding upon the company, for the sale, lease, or disposal of, or otherwise dealing with, the mining or mineral interests of the company, or for the variation of amendment of such contract or contracts."

In moving the adoption of the resolution the Chairman said:—In view of the great activity in far East Rand properties adjoining our own, we are naturally hoping that opportunities may soon arise for dealing with our mynpachts. Under the present articles of association business of this nature has to be referred to a general meeting of shareholders. As a very large proportion of our shares are held in London that course involves a rather lengthy interval occurring before a definite reply can be given to any offers we may receive for the ground. Your board fear that the delay thus occasioned might in certain circumstances be prejudicial to business, and the object of the resolution before the meeting is in such an event to give the directors full powers to deal with your mining ground without further reference to shareholders. If any question should arise of dealing with Government it would be indispensable that your board should have full powers to act without delay. There are other and equally likely contingencies in which such powers may prove equally useful if chances to deal on satisfactory lines are not to be jeopardised by delay. Before moving the resolution I may mention that in the interests of shareholders and directors alike it appears to us advisable that very full notice should be given of a directors' meeting at which it is proposed to take a decision on any scheme for dealing with our gold areas. If one of the directors will propose that as an amendment it can be added to the resolution.

The resolution was duly seconded, and passed unanimously.

Mr. G. C. Fitzpatrick moved to add the following proviso.—"Provided, however, that the special powers hereby conferred on the board shall not be exercised except at a special meeting of directors called for the purpose, of which meeting seven days' clear notice shall be given, and any resolution of the board at such meeting by which the said special powers are exercised shall not be valid unless at least two-thirds of the directors present vote in favour of it."

This was also agreed to, and the meeting thereupon terminated.

THE TRANSVAAL GRAPHITE M. & M. Co., Ltd
W. M. HUDSON, Managing Director.
Foundry Plumbago.—Flake Graphite.—Pipe Jointing.—"Murrella" Boiler Composition.—Graphite Pigment, etc.
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DE BEERS CONSOLIDATED MINES,

LIMITED.

(Incorporated in the Transvaal.)

REPORT OF DIRECTORS

For the Twelve Months ended 30th June, 1916.

Submitted to the Shareholders at the Twenty-Eighth Ordinary General Meeting, held on the 30th November, 1916.

To the Shareholders.—

Gentlemen,—Your Directors beg to submit their Twenty-Eighth Annual Report and Balance Sheet at 30th June, 1916, and Profit and Loss Account for the year ended 30th June, 1916.

The Balance brought forward from 30th June, 1915, was		£289,264 6 4
During the year, as shown by the accompanying statement, the diamonds sold, less decrease of stocks taken at cost, amounted to ...		2,142,091 19 3
Add to this the following—		
Interest and Dividends on Investments	£130,077 15 2	
Net Revenue from other sources	2,940 6 9	
Revenue from other sources	22,671 1 2	
Suspense Profit Account—		
Diamonds unsold, June 30, 1915...£1,150,989 15 7		
Less diamonds unsold June 30, 1916 648,734 0 3		
	502,255 13 11	
		657,944 17 0
		£3,089,301 2 7
Less Expenditure as follows:—		
Mining Expenses during period of production	£395,850 5 5	
Expenditure on Farms, Kimberley-Alexandersfontein Tramway and Charges, including Donations ...	145,931 8 7	
Interest on Company's 4½ per cent. S.A. Exploration Debentures and on Capital of Leased Companies	169,989 15 6	
Sinking Fund for repayment of Debentures	72,893 3 4	
Mining Profits Tax—estimated ...	150,000 0 0	
British Income Tax	9,135 16 3	
Expenditure consequent on the war as detailed in Profit and Loss Account	316,660 8 2	
		1,260,460 17 3
Leaving a balance of		£1,828,840 5 4

Which has been dealt with as follows:—

Preference Shareholders:—		
Dividend of 10s. per share in respect of the half year ended 31st December, 1914	£400,000 0 0	
Dividend of 20s. per share in respect of the year ended 31st December, 1915	£800,000 0 0	
		1,200,000 0 0
Balance carried to next year		£628,840 5 4

The stock of blue ground and lumps on the floors at 30th June, 1916, was as follows:—

	Loads.
De Beers Mine	48,396
Wesselton Mine	2,607,097
Bultfontein Mine	2,379,211
Dultoitspan Mine	4,594,272
	9,628,272

Your Directors have much pleasure in announcing that in consequence of some demand for diamonds in the early part of the financial year they were able to renew washing operations at Bultfontein and Wesselton Mines on 1st January 1916, and at Dutoitspan Mine in April, 1916. The demand gradually increased, and to replenish the blue ground on the floors it was essential to restart mining, and in May and June of this year the Wesselton and Bultfontein Mines were gradually reopened.

The Profit and Loss Account shows that the revenue from diamonds amounted to £2,142,091 19s. 3d., though the actual sales of diamonds amounted to £2,652,561 11s. 3d. The difference between these figures represents the depletion of diamond stocks during the year at cost of production.

The revenue from all other sources amounted to £155,689 3s. 1d., bringing the total revenue for the year to £2,297,781 2s. 4d.

The mining expenditure amounted to £395,850 5s. 5d.; charges, expenditure on farms and landed property and tramways amounted to £96,082 5s. 8d. Interest on Capital of Leased Companies and Interest and Sinking Fund on Debentures totalled £242,882 18s. 10d. Donations to Public Institutions and Relief, Compensation and Annual Leave payments to employes amounted to £49,849 2s. 11d. The Mining Profits Tax and British Income Tax amounted to £159,135 16s. 3d., whilst the expenditure consequent on the war amounted to £316,660 8s. 2d., which included the cost of maintenance of the mines and floors whilst the mines were closed down, Gratuities to employes who resigned, and salaries and wages paid to employes on active service as detailed in the Profit and Loss Account.

The total expenditure amounted to £1,260,460 17s. 3d. as against revenue £2,297,781 2s. 4d., the result being that £1,037,320 5s. 1d was carried to the credit of Appropriation Account.

This result enabled your Directors to redeem their obligation to the Preference Shareholders for the period 1st July, 1914, to 31st December, 1915, by the payment of £1,200,000 in dividends.

The General Reserve Fund stands at £1,463,982 19s. 5d., and the Fund to redeem the De Beers 4½ per cent. Exploration Debentures has been increased to £345,706 10s. 4d., the two Funds being represented by securities at the market price prevailing at 30th June, 1916

De Beers Consolidated Mines, Limited.—continued.

At the close of the period under review your Company held £1,160,900 in English Government Treasury Bills, and £869,159 in the 4½ per cent. War Loan, and since the close of the financial year your Directors subscribed £200,000 to the recent Union Government 5 per cent. issue.

The Cape Explosives Works, Limited, which is owned and controlled by your Company, continued its operations during the year, but its production would have been much greater had the Diamond Mines not been closed down. The sales of explosives amounted to 386,741 cases, as against 321,241 cases the previous year.

In this connection your Directors have pleasure in stating that the Explosives Contract with certain Gold Mining Groups at Johannesburg was renewed as from 1st July last for a period of 10 years.

Your Directors much regret to have to record the death in action and from disease during the year of several of the Company's employes, as detailed in the General Manager's Report, and they sympathise most sincerely with the relatives and dependents who mourn their loss.

A Report by the General Manager on the operations of the Company during the year is submitted at this meeting.

In terms of Clause 84, Sub-section (c) of the Company's Articles of Association, four Directors retire, namely:—

George William Compton,
Francis Baring-Gould,
Francis Oats,
Henry Percy Rudd,

but, being eligible, they offer themselves for re-election.

FRANCIS OATS, Chairman,
G. W. COMPTON,
DAVID HARRIS,
D. J. HAARHOFF,
C. E. NIND,
ROBERT PHILIPSON-STOW,
Directors.

Kimberley, 23rd September, 1916.

BALANCE SHEET, YEAR ENDING 30th JUNE, 1916.

Dr.

Capital:—		
300,000 Preference Shares at £2 10s. 0d. each	£2,000,000 0 0	
1,000,000 Deferred Shares at £2 10s. 0d. each	2,500,000 0 0	
		£4,500,000 0 0
De Beers 4½ per cent. South African Debentures, secured by Mortgage of Assets purchased from the London and South African Exploration Company, Ltd., redeemable by 1st January, 1930		1,635,495 0 0
Reserves (per Contra):		
General Fund... ...	£1,463,932 19 5	
Redemption Fund: S.A. Exploration Debentures ...	345,706 10 4	
	£1,809,639 9 9	
Blue Ground Stocks, 30th June, 1916, at cost	1,373,091 11 9	
		3,182,781 1 6
Suspense Liability under Agreements with Leased Companies		70,117 13 1
Cape Explosives Works, Limited... ...		179,819 2 5
Current Liabilities:—		
Loans and Open Accounts	£120,273 15 8	
Unclaimed Dividends and Sundries	105,226 18 3	
Interest on Debentures accrued to date	36,798 12 9	
Commissioner of Inland Revenue, Union of South Africa, Estimated	150,000 0 0	
Preference Shareholders: Dividend declared 29th June, 1916	800,000 0 0	
		1,212,293 6 8
Suspense Profit Account:		
Diamonds, per contra, unsold at date	£347,010 19 9	
Participation in South-West Africa Diamonds unrealised at date ...	301,723 0 11	
		648,734 0 8
Balance Transferred from Appropriation Account		628,840 5 4
		£12,058,086 9 8

Cr.

Property:		
De Beers and Kimberley Mining Claims held under Government Licences, Dutoitspan, Bultfontein, and Wesselton Mines, Wesselton Estate, and other Mining Interests	£3,248,553 11 8	
Estates purchased from the London and South African Exploration Company, Limited	1,635,495 0 0	
Farms and other Landed Property	91,775 0 0	
Machinery, Permanent Works, Offices, Compounds, and Stand Property	1 0 0	
		£4,975,824 11 8
Investments in Stocks and Shares ...		1,482,329 3 6
Reserves (per Contra):		
Investments, representing Funds per contra at Market Prices, 30th June, 1916	1,809,639 9 9	
Blue Ground on Floors: 9,628,976 loads at cost deposited on Floors	1,373,091 11 9	
		3,182,781 1 6
Timber, Fuel, and other Mining Stores		270,853 18 8
Live Stock		18,361 18 9
Debtors, Special Investments, Bills and Cash:		
Open Accounts	£182,241 4 1	
Short Loans against Security	50,125 0 0	
Special Investments at Market Prices, 30th June, 1916	1,026,617 11 9	
Bills Receivable	195,587 1 3	
Cash at Bankers and in hand—Kimberley and London	24,630 17 10	
		1,479,201 14 11
Diamonds on hand at cost of production		347,010 19 9
Participation in South-West Africa Diamonds		301,723 0 11
		£12,058,086 9 8

W. PICKERING, Secretary.
JNO. A. NEVILLE, Chief Accountant.

We certify that all our requirements as Auditors have been complied with, and that we have examined the above Balance Sheet with the Accounts and Vouchers relating thereto, including the audited returns of the London Transfer Office, and find the same to be correct.

HOWARD PIM AND HARDY,
SALISBURY AND BEATON,
Auditors.

Kimberley, 22nd September, 1916.

De Beers Consolidated Mines, Limited.—continued.

Profit and Loss Account for the Year ending 30th June, 1916.

Dr.			Cr.	
To Mining Expenditure during Period of Production:			By Diamond Account	£2,142,091 19 3
Wesselton Mine:			.. Interest and Dividends on Investments after adjusting Reserve and Special investments to Market Prices at 30th June, 1916	130,077 15 2
Cost of hauling Blue Ground washed . £142,448 15 1			.. Net Revenue from Rents	2,940 6 9
Washing Expenses... 50,692 8 0			.. Sundry Receipts	20,333 10 2
	£193,141 3 1		.. Transfer Fees	147 11 0
Bultfontein Mine:			.. Profits Realised on Investments	2,190 0 0
Cost of hauling Blue Ground washed . 120,085 9 7				
Washing Expenses... 57,177 5 11				
	177,262 15 6			
Dutoitspan Mine:				
Cost of hauling Blue Ground washed . 14,404 8 8				
Washing Expenses... 11,041 18 2				
	25,446 6 10			
		£395,850 5 5		
.. Expenditure on Farms, Landed Property, and Kimberley-Alexandersfontein Railway		41,444 19 10		
.. Charges:				
Salaries, etc., Head Office	13,893 4 0			
General Charges, Stationery, Cables, Travelling Expenses, Licences, Agents' Expenses, and Sundries	17,955 18 2			
Legal Expenses	1,132 4 6			
Donations to Public Institutions and Relief, including amount distributed in accordance with resolution of General Meetnig held 22nd October, 1894	36,154 17 2			
Compensation	5,345 8 9			
Auditors' Fees	875 0 0			
London Transfer Office—Net Expenses	5,135 17 4			
Directors' Fees	17,665 1 10			
Annual Leave	10,348 17 0			
		104,486 8 9		
.. Interest on Capital of Leased Companies		96,392 10 0		
.. Interest on Debentures		73,597 5 6		
.. Sinking Fund for Repayment of Debentures		72,893 3 4		
.. Mining Profits Tax, Union of South Africa, accrued to 30th June, 1916, Estimated		150,000 0 0		
.. British Income Tax		9,135 16 3		
.. Maintenance of Mines and Floors while closed down		243,329 13 2		
.. Expenditure consequent on the War:				
Salaries and Wages of Employes on Active Service	69,340 3 11			
Gratuities to Employes resigning..	3,990 11 1			
		73,330 15 0		
.. Balance carried to Appropriation Account		1,037,320 5 1		
		£2,297,781 2 4		£2,297,781 2 4

Appropriation Account.

Dr.			Cr.	
To Suspense Profit Account:			By Balance transferred from Profit and Loss Account	£1,037,320 5 1
Diamonds unsold at date, at cost £347,010 19 9			.. Balance unappropriated, June, 30, 1915	289,264 6 4
Participation in South-West African Diamonds unrealised at date 301,723 0 11			.. Suspense Profit:	
	£648,734 0 8		Diamonds unsold 30th June, 1915, now written back £848,428 1 10	
.. Preference Dividend Account:			Participation in South-West Africa Diamonds, unrealised 30th June, 1915, now written back 302,561 12 9	
10s. per share on 800,000 shares payable to Preference Shareholders registered at 31st March, 1916, in respect of the half-year ended 31st December, 1914	400,000 0 0			1,150,989 14 7
20s. per share on 800,000 shares payable to Preference Shareholders registered at 30th June, 1916, in respect of the year ended 31st December, 1915	800,000 0 0			
	1,200,000 0 0			
Balance carried to Balance Sheet	628,840 5 4			
	£2,477,574 6 0			£2,477,574 6 0

Kimberley, 22nd September, 1916

W. PICKERING, Secretary.
JNO A NEVILLE, Chief Accountant.

TRANSVAAL AND DELAGOA BAY INVESTMENT COMPANY, LTD.

(Incorporated in the Transvaal.)

REPORT

Submitted to the Shareholders at the Ordinary Annual General Meeting, held in the Board Room, Exploration Buildings, Johannesburg, on Thursday, the 30th November, 1916, at 4 p.m.

The Directors have pleasure in submitting to the Shareholders the annexed Statement of Accounts for the year ended 31st August, 1916.

The realised net profit amounts to			£44,541 4 2
Balance brought forward from last year is		£136,933 16 4	
From which is deducted:—			
Dividend No. 13 of 3s. 6d. per share	£32,375 0 0		
Bonus to Directors	500 0 0		
Provision for Coal Cutters and further Electrical Installation	10,000 0 0	42,875 0 0	94,058 16 4
Making the total to the credit of Profit and Loss Account			£138,600 0 6

The Directors recommend that a Dividend of 3s. 6d. per share = 17½ per cent., be paid. This will absorb £32,375 and leave a balance of £106,225 0s. 6d. to be carried forward.

Financial Position.—Cash Assets, less Sundry Creditors, amount to £122,167 6s. 4d.

The Company's holding in Shares has been somewhat increased by the purchase of first-class Rand Mining shares.

The amount invested in short dated British Treasury Bills has been considerably increased during the year.

Loan against Securities was reduced to £5,000 at the end of the fiscal year and is now paid off entirely.

The Directors again draw attention to the satisfactory results achieved for the year, profits were rather larger, and the financial position shews added strength.

The Transvaal and Delagoa Bay Collieries, owned entirely by this Company, produced 573,837 tons of coal. Included herein are 15,516 and 1,096 tons supplied gratis to the Imperial and Union Governments respectively; and making allowance for this tonnage the increase in revenue producing output was 1,773 tons.

Having regard to the abnormal conditions prevailing during the year, the supply of Railway trucks has not been unsatisfactory.

Great improvements have been made recently in the design of Electric Coal Cutters, and a plant of the most modern type, suitable to the conditions of your Colliery, will be installed. Such plant will require additional electrical power, and the sum of £10,000 has been set aside in the Accounts to defray the cost of the installation. It is anticipated that increased efficiency and lower working costs will result.

The width of the seam, and superior quality of the coal, are unchanged. Machinery, Plant, Buildings and Railway have been efficiently maintained and are all in good condition. The sum of £8,461 7s. 9d. has been written off for Depreciation. Capital Expenditure amounted to £1,621 9s. 1d., and was incurred chiefly in building new cottages for married employees.

The annexed Manager's Report gives particulars of the year's operations.

The Directors have much pleasure in again expressing appreciation of the excellent services rendered by the General Manager, Mr. James McPhee, M.Sc., M.E., and they also desire to testify to the good work of the Staff and other Employees.

Donations.—In addition to the sum of £260 15s. donated to the Governor-General's Fund and various local charities, your Company joined with certain other Collieries, Members of the Transvaal Coal Owners' Association (1910), Ltd., in a free gift of 110,000 tons of best steam coal to the Imperial and Union Governments for the transport purposes of the German West and East African campaigns. Of this total, the Company's contribution amounted to 16,612 tons.

The Property in Johannesburg is unchanged, and the Buildings are in good condition.

Directorate.—In terms of the Articles of Association all the Directors retire. They offer themselves for re-election.

Auditors.—The Auditors, Messrs. E. Danckwerts & Co., retire, and offer themselves for re-election.

By order of the Board,

B. MOSES, *Secretary.*

The Transvaal Gold Fields Building,
6 Fraser Street, Johannesburg,
20th November, 1916.

Profit and Loss Account for the Year ended 31st August, 1916.

Dr.		
To Directors' and London Committee Fees		£208 19 0
,, Salaries, Printing, Stationery, Audit, Insurance, Advertising, Legal and General Expenses in Johannesburg and London		939 4 5
,, Salaries, Insurance and General Expenses in Delagoa Bay		558 9 4
,, Licenses, Taxes and Expenses on Farms, Claims and Landed Properties		1,694 11 8
,, Property Maintenance, Delagoa Bay and Johannesburg		339 16 1
,, Contributions to Governor-General's Fund, and Sundry other Donations		260 15 0
,, Amount written off for Depreciation of Machinery, Buildings, Railway, etc.		8,461 7 9
,, Balance carried to Balance Sheet		44,541 4 2
		£57,054 7 5

Cr.	
By Realized Profit (*less* Union Government Tax), Rents Received in Johannesburg and Delagoa Bay, Interest, etc.	£57,054 7 5
	£57,054 7 5

B. MOSES, *Secretary.*

S. C. BLACK,
F. DE FERRIERES,
Directors.

Johannesburg, 17th November, 1916.

Examined and found correct,
E. DANCKWERTS & CO., *Auditors.*

Transvaal and Delagoa Bay Investment Company, Limited.—continued.

BALANCE SHEET, 31st AUGUST, 1916.

Dr.				Cr.			
To Share Capital Authorised and Issued 135,000 Shares of £1 each, fully paid			£135,000 0 0	By Property—			
,, Sundry Creditors and Credit Balances, including Provision for New Machinery, as specified below		£19,987 11 1		Freehold Farm "Driefontein" (The Transvaal and Delagoa Bay Collieries), Farms—Freehold, Leasehold, Mineral Rights and under Option—in the Transvaal, Freehold Land and Buildings at Delagoa Bay, House Property in Johannesburg and Mining Claims			£117,289 14 10
Unclaimed Dividends		2,836 14 0		,, The Transvaal and Delagoa Bay Collieries—			
			22,824 5 1	Branch Railway Line to Station on Main Line:			
,, Profit and Loss Account—				Amount at 1st September, 1915 ..	£9,000 0 0		
Balance from last Account .		130,933 16 4		*Less* Depreciation .	1,000 0 0		
Less Dividend No. 13 to 31st August, 1915, at the rate of 3s. 6d. per Share	£32,375 0 0					£8,000 0 0	
Bonus to Directors	5 0 0			Permanent Works, Shafts, Plant Machinery, Water Service, Pumping Stations, Locomotives, Assay Plant, Buildings, Tools and Implements—			
Provision for Coal Cutters and further Electrical Installation	10,500 0 0	42,875 0 0		Amount at 1st September, 1915 ..	£64,246 1 6		
		54,058 16 4		*Less* Depreciation .	7,166 13 6		
Add Profit for year ended 31st August, 1916, as per Account		44,541 4 2			£57,079 8 0		
			136,600 0 6	Additions during the Year . ..	1,447 11 11		
						58,526 19 11	
				Livestock, Vehicles and Furniture :			
				Amount at 1st September, 1915 .	750 2 8		
				Less Depreciation .	225 0 10		
					£525 1 10		
				Additions during the Year	173 17 2		
						698 19 0	
				Stores, Bags and Stock of Coal		12,582 7 6	
							79,808 6 5
				,, Furniture, Farming and other Stock (*Less* Depreciation) and Amounts Paid in Advance			2,344 13 10
				,, Sundry Shares—			
				Witwatersrand Native Labour Association, Ltd.—219 £1 Shares, 12s. paid, 25s. per Share Deposit .		405 3 0	
				Other Shares at or under Cost		14,167 3 7	
							14,572 6 7
				Sundry Investments—			
				Sundry Debentures, at or under Cost		9,419 0 0	
				£2,500 4½ per cent. War Loan, 1925-1945 ..		2,375 0 0	
							11,794 0 0
				,, Sundry Debtors			20,364 9 4
				,, Cash at Bankers		25,250 14 7	
				,, British Treasury Bills, at short dates		70,000 0 0	
				Loan against Securities		5,000 0 0	
							100,250 14 7
			£346,424 5 1				£346,424 5 7

B. MOSES, *Secretary.*

S. C. BLACK,
F. DE FERRIERES,
Directors.

We have audited the Balance Sheet of the Transvaal and Delagoa Bay Investment Company, Limited, dated the 31st August, 1916, above set forth, and have obtained all the information and explanations we have required. In our opinion, such Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the Company's affairs according to the best of our information and the explanations given to us and as shewn by the books of the Company.

E. DANCKWERTS & CO., *Auditors.*

Johannesburg, 14th November, 1916.

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W. W. HOY,
General Manager.

Johannesburg,
November, 1916.

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